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CHOICES

THE HUMAN DEVELOPMENT MAGAZINE

June 2000

EXCLUSIVE INTERVIEW
with French President
Jacques Chirac

Special Issue on Information Technology for Development

Estonia's 'Tiger Leap' to Technology

Malaysia: Internet on Wheels

Egypt's Cyber Cafes for the Poor

Reaching out to communities with the Internet and E-mail: Cameroon, Jamaica and P...

Netaid.org Tackles Extreme Poverty

FROM THE EDITOR IN CHIEF

The statistics are staggering. According to UNAIDS (the Joint United Nations Programme on HIV/AIDS) 33.6 million people in the world are living with HIV and AIDS—23.3 million of them in sub-Saharan Africa. In 1999, 3.8 million people were infected with the AIDS virus in Africa. Today, 10 million African children have no parents because of AIDS. Africa is under siege.

The impact of HIV/AIDS on developing economies can not be understated. It rips across social structures, targeting the young, and undermines vital economic growth. Countries that are already strapped for funds have to deal with the burden of the epidemic, providing support for orphans and trying to assist poor families who have lost breadwinners and caretakers.

Can this war be won? Does Africa and the rest of the world have the political will to stop this epidemic from spreading and to respond to the associated social and economic losses now facing much of Africa?

We live in a time when the assets of the 200 richest people are more than the combined income of 41 percent of the world's people and when income disparities have never been higher. But we also live in a time when civil society has become a force to be reckoned with and billionaires have hearts. Bill and Melinda Gates have given US$750 million for developing vaccines for HIV, malaria and tuberculosis and Ted Turner gave $1 billion—$100 million a year for 10 years—to programmes run by UN agencies in the developing world.

Only a global movement that brings together the resources, talent, energy, commitment, wisdom and vision of people and organizations—public and private—can stop this epidemic and respond to the compelling needs of the individuals, families, communities and nations affected by HIV/AIDS. We must succeed, but it will take a concerted effort, additional resources and new partnerships between multilateral and bilateral agencies, non-governmental organizations (NGOs) and communities, the private sector and national governments. This movement has already begun.

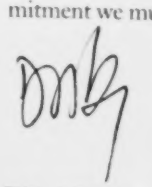
In an address to the Commonwealth lecture in London earlier this year, UN Secretary-General Kofi Annan said, "More people have died of AIDS in the past year in Africa than in all the wars of the continent." Last December, the Secretary-General launched the International Partnership Against AIDS. And in January 2000, US Ambassador to the UN Richard Holbrooke, as President of the Security Council, held a meeting on AIDS in Africa. It was the first session ever on a health and development issue and the first time that these issues were discussed as a security threat.

At that meeting, Mark Malloch Brown, Administrator of the United Nations Development Programme (UNDP), said, "View this as a three front war: the classrooms and clinics of Africa; the families of Africa; and international action—the critical support needed to back Africa's frontline."

Political will is already working. In Uganda, President Yoweri Museveni decided as early as the 1980s that the only way to make people aware of AIDS was to bring the problem out in the open. Today, the infection rate in Uganda has been reduced to 9.7 percent from 15 percent. In Senegal a vigorous campaign has kept the infection rate to two percent.

UNDP has been involved in the fight against AIDS in developing countries for a long time. At a recent meeting of 133 country heads of UNDP in Glen Cove, New York, Malloch Brown initiated a plan with resident representatives from southern Africa to help fight the spread of HIV/AIDS in this region. From a campaign on HIV/AIDS awareness to a plan to replicate the best practices of countries like Uganda in other African nations, Malloch Brown said, "This is an issue of absolute emergency. We have to act quickly and effectively."

The most effective ways are to break the silence around the issue of AIDS, change behaviour patterns and generate resources to support existing and new UN agency programmes. For the countries that are our partners in development, we have committed to a war against HIV/AIDS: a commitment we must honour.



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CHOICES
THE HUMAN DEVELOPMENT MAGAZINE

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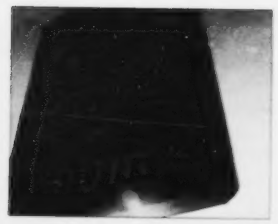

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COMMENTARY

THE INTERNET AND DEVELOPMENT

In a few short years the Internet has already changed our world beyond all recognition. Everywhere we look the "dot.com" revolution is transforming the way we live, the way we work, the way we do business.

It is difficult to grasp the scale and pace of the change. Less than three years ago, CHOICES first addressed the issue with the cover-line "An Information Revolution or Cyberhype?" At the time there were still only 50 million Internet users worldwide and it appeared a legitimate question. Now it is already redundant. If anything the hype was not equal to the reality. Currently Internet traffic doubles every three months with e-commerce growing by 100 percent a year. By 2001 there will be over 700 million Internet users. The latest estimates suggest that in just over five years some 900 million electronic devices could be connected to the Internet—equaling the number of telephones in the world.

For many in the developing world and civil society these rapid changes are seen as a threat. Far from helping, the information explosion is seen as a major contributing factor to the growing gap between rich and poor, both within and between countries. As high technology comes to make up an increasingly important part of the global economy, poorer countries with fewer resources and less well-educated workforces are being left further and further behind. Sub-Saharan Africa, the worst affected region, has nearly 10 percent of the world's population but just 0.1 percent of its Internet connections. And the gap is widening rather than narrowing.

Finding ways to bridge this "digital divide" is undoubtedly a real and critically important challenge. It will require new investments in telecommunications infrastructure and improved regulatory frameworks across the developing world. That will in turn depend on new international support. But the fact that it is a daunting task should not obscure the tremendous underlying opportunities. Already for example several countries are experimenting with banking and other services for poor rural areas using only wireless technology. And in practice, the cost of Internet access and cellular services is plunging. New handsets that will retail for less than US$50 will soon start to create new incentives for the private sector to expand their horizons into underdeveloped markets. It will be a slow and difficult process, but it is achievable.

And that in turn will allow us to take advantage of perhaps the most important aspect of the Internet. By eliminating space and time it gives us an unprecedented means of overcoming two of the root causes of extreme poverty—ignorance and isolation. From dramatic improvements in distance learning to access to updated health and medical information to a newfound ability to participate in world markets, it will for the first time allow many poor and isolated groups to become part of the global community.

For the United Nations Development Programme (UNDP) the Internet opens the door to a new type of public and private partnerships and gives us the ability to widen our support and knowledge bases. And just as important for an agency with 133 country offices and a vast pool of experience, it offers the chance to transform our internal working practices as we make the transition to a decentralized, networked global knowledge organization.

The most prominent example of UNDP's commitment to using the Internet for development has been the launch of the Netaid website *(www.netaid.org)* in partnership with Cisco Systems. Building on the tremendous publicity from last year's launch concerts in Geneva, London and New York, the site has already begun to mobilize new constituencies around campaigns that take advantage of the unique strengths of the web.

Now being run by a specially created foundation with support from the United Nations Children's Fund and other partners, it has already registered over 3,000 non-governmental organizations, 8,000 individuals and 200 corporations and has received more than 50 million hits. It recently launched an innovative project with *Time* magazine, CNN and the International Rescue Committee for a special Mother and Baby Survival Project. More initiatives will be rolled out over the coming months.

At the same time, UNDP has now formally inaugurated a dedicated "Knowledge Connection" intranet, linking all the country offices to help share and disseminate our best practices on policy and programme issues. Already it is generating unprecedented interaction between our different regions, allowing us for the first time to take real advantage of our global reach. As the programme expands, it will help provide the tools needed for UNDP to become a nimble, responsive centre of excellence for policy advice for our developing country clients.

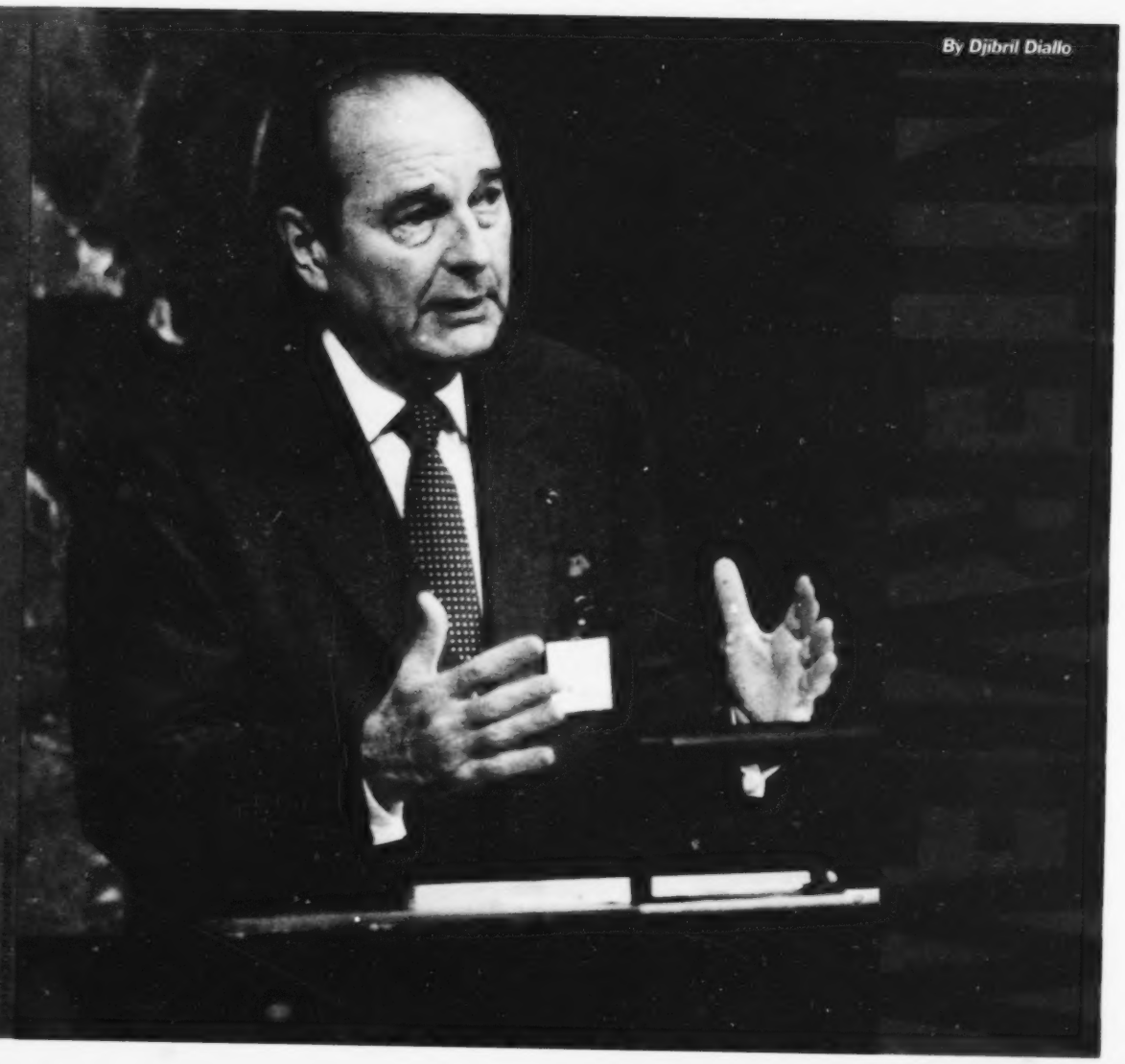
To help meet that goal, UNDP is increasingly targeting information technology (IT) issues generally and the Internet in particular in its projects around the world. As the articles in this issue clearly demonstrate, UNDP is already engaged in a wide range of programmes that demonstrate both how we can sensibly apply networking skills and use the Internet to create new opportunities for the poor.

In Malaysia, for example, UNDP has pioneered the use of Mobile Internet Units in rural areas based on the positive experience of using mobile video units in Mali in the 1980s. In Egypt, we are piloting special technology access centres that provide IT training for civil society and low-income groups. More recently, UNDP led a highly successful project to set up the first indigenous Internet networks in East Timor. There are already dozens of other projects underway from Gabon to Uzbekistan. The challenge facing us now is to build on these programmes so we can fully harness the power of the Internet and ensure that the world's poor are among the beneficiaries of the information revolution and not its victims. ■

Mark Malloch Brown is the Administrator of the United Nations Development Programme.

In an exclusive interview with CHOICES conducted in April 2000, the President of France, Mr. Jacques Chirac, referred to the various challenges confronting the world in the 21st Century, such as civil strife, poverty and the HIV/AIDS pandemic. President Chirac also assessed the crucial role of the United Nations Development Programme (UNDP) in helping developing countries overcome these challenges and outlined his vision of the United Nations in the new Millennium.

By Djibril Diallo



Mr. President, thank you for granting us the honour of this interview.

I am pleased to have this opportunity to discuss a subject that is especially close to my heart: that of sustainable development, to which UNDP is dedicated. And I'd like to start by saying that France is proud to have been chosen for the official presentation of the year 2000 edition of the "Human Development Report," which is dedicated to human rights and its relationship to development.

In your opinion, what are the major challenges of the 21st Century?

Peace, development, poverty eradication, protecting the environment and controlling large-scale pandemics, scientific and technological progress, and globalization: these are the immense challenges that the world must confront. This must be done through joint efforts, since the issues go beyond national or even regional boundaries.

To succeed, we must draw up a planetary code of ethics capable of inspiring our actions and of infusing them with the highest meaning. It will instil the spirit of solidarity and responsibility. It will provide a foundation for the new collective disciplines that are taking shape. It will serve as the ideal and the moral backbone for global governance, which we must foster.

Given the challenges that you cite, isn't it paradoxical that the total public development assistance provided by OECD countries has declined during the last few years?

It's true, and it's absolutely unjust. Globally, the world has never been wealthier, yet hunger and poverty are far from being eradicated. We can change that, but we must have the political will and a spirit of solidarity, both of which have been lacking too often.

Some developed countries believed that economic growth and trade would be sufficient to resolve the problems of underdevelopment and widespread poverty. "Trade, not aid," that's what tends to be prescribed, while exclusion continues to increase. The result: dozens of countries are quite simply marginalized, without recourse. Aid slips away; the most deprived see the gap widen and don't have the means to catch up.

For France, it's stating the obvious: to emerge from exclusion, the most disadvantaged must be assisted in overcoming their initial handicap. That is the role of official development assistance, which remains indispensable for all countries still deprived of access to international financing. That's why I continue to work for an increased flow of public development assistance—especially now—when so many countries in the North are experiencing renewed growth.

I would like to emphasize the link between this issue and that of human rights. Widespread poverty, extreme poverty and hunger are all obstacles to respect for people's fundamental liberties, for they affect the dignity of human beings and their capacity for self-realization. France, which as a country acts on behalf of universal respect for human rights, also advocates that the most disadvantaged countries receive the assistance necessary for

economic recovery, without which rights will remain an illusion.

The international community attaches increasing importance, I am happy to say, to respect for our universal values. But we must not limit ourselves to denouncing and condemning. We must follow the logic to its ultimate conclusion and help the poor countries bring about minimal conditions for the full exercise of these rights.

There is a growing trend in favour of cancelling the debt of poor countries. What is the position of France on this subject?

Too much indebtedness is an insurmountable obstacle to development. And for many countries, this indebtedness results at least as much from external circumstances as from inadequate management. The economic and social effects of over-indebtedness need to be offset.

That is why, since the beginning of the debt crisis in the 1980s, France has advocated a generous policy and proposed to its partners massive debt cancellation measures to benefit the poorest countries, as well as programmes for economic recovery and better respect for the principles of good governance.

Now we must urgently implement the new regime proposed by the G-8 in Cologne—an improvement over the one that we drew up in Lyon in 1996. It was accepted at the annual meetings of the International Monetary Fund and the World Bank. Now discussions must intensify so that effective decisions may be taken country by country. This priority should also be reaffirmed at Okinawa during the next G-8 summit. For my part, I have again stated that France is ready to go still further, cancelling all of its public debts with regard to the poor, very indebted countries, within the framework of a global agreement.

The stakes are high. If the poorest and most indebted countries verify that a good economic programme accompanies real financial relief they will know how to implement the reforms needed to break the vicious circle of non-development.

What importance should be given to the UN and its agencies in relation to other large international institutions?

I would like the position of the UN and its institutions to become even stronger in the future, keeping pace with the development of international exchanges. Because of its universal character and its broad capabilities, the UN General Assembly is a little like a Parliament of States—the driving force behind our evolving world society. And it is upon the Security Council that the community of nations has conferred the main responsibility for maintaining international peace and security.

The question today is not only that of relations between the UN and other international institutions, but also—and most importantly—that of the capacity of the UN to modernize and adapt to global changes.

From this standpoint, I attach particular importance to the matter of coherence, so that specialized institutions develop among themselves, and with other international organizations, relations that avoid duplication of effort and ensure unity of action among all the multilaterals. Regulatory mechanisms should be established to assure harmonization among the different branches of international law. Concerning the matter of cooperation and development assistance, whatever is best must be drawn from extremely limited resources.

The UN is one of the most beautiful creations of the 20th Century. The ideals that led to its founding are even more necessary in a globalized world. It is the obligation of everyone who serves the UN system never to let it stagnate; to struggle against force of habit; to refuse the crutches of dogmatism and stilted language; and to demonstrate once and for all the UN's capacity to grasp the real problems of the world and respond to them for the benefit of all.

The Administrator of UNDP, Mark Malloch Brown, has emphasized the need for massive investment in Africa by the international community. However, because of the decline in contributions to UNDP's core resources, the assistance it provides to the African continent has fallen by 50 percent in five years. What do you think needs to be done to reverse this decline?

For years, I have been committed to ensuring that Africa is not forgotten. Many African countries have agreed to considerable adjustment efforts and are beginning to reap the benefits. We must support them. I am pleased that the mobilization of international public opinion in favour of Africa is growing stronger all the time. I hope that the governments of the developed countries will act accordingly by showing themselves more generous on its behalf.

Faced with the reduction in its resources, UNDP has committed to a fundamental reform of its methods. It has emerged transformed and more effective than ever. The time has come for it once again to find a higher level of financing, notably so that it can respect the African priority to which you rightly allude. When the Administrator came to Paris last December everyone with whom he spoke affirmed France's determination to make additional resources available to him in support of his efforts.

Increasingly, developing countries are requesting UNDP's assistance in redefining their institutional architecture, legislative frameworks and administrative practices to encourage a development dynamic within the new international environment. How important do you consider these reforms?

Development is dependent upon respect for law, the quality of justice and the stability and effectiveness of the legal framework for investment. In order for societies to mobilize around a national development strategy, they must feel confident that everyone will be able to enjoy the just rewards of their labours. In too many countries even now, the law, protection of the weak and most vulnerable, and the basis for the security of economic exchanges are poorly respected—or non-existent. It is therefore legitimate for UNDP to devote a growing part of its resources to assist countries wishing to consolidate their institutions.

The HIV/AIDS pandemic is spreading in many African and Asian countries and is in the process of wiping out development gains. What should the international community be doing to curb this progression?

It's a real tragedy that has hit Africa and Asia especially hard. For several years now, the international community has been mobilizing. The initial strategy concentrated on preventive actions. It must be stated that these efforts have remained insufficient: the evil continues to strike, harder than ever.

That is why I have been fighting for three years for new therapies to be made accessible to the poor countries while we await the release and distribution of a vaccine, and for an end to the scandal of an evil whose victims are more numerous

in the South and for which the medicines are in the North.

France has made two concrete proposals. The first is the creation of a joint fund to mobilize the necessary financing. The second is the organization of a tripartite conference bringing together bilateral and multilateral donors, the pharmaceutical industries and the countries of the South to examine together the conditions for making treatments available to the poor countries. It is urgent to act, for each passing year brings hundreds of thousands of deaths and infections.

At Okinawa, at the G-8 summit, and then in New York at the Assembly of the Millennium, I will renew my proposals on these subjects.

In recent years, emergency aid has been increasing at the expense of investment in development. Does this mean that it is better to cure than to prevent?

The growth of emergency aid is a positive tendency. It makes it possible to relieve more suffering, to intervene more rapidly and more often each time that there is a humanitarian catastrophe. The recent famines in certain African countries, the natural catastrophes in Latin America, and again in Asia, have shown that this form of aid remains necessary—even indispensable—no matter what happens.

We also know that we must make progress in mobilizing and distributing emergency aid. Each catastrophe painfully teaches us the limits of our emergency systems.

I do not think that we need to draw a parallel between the evolution of this type of aid and assistance earmarked for investments in development. Each one has its purpose and both should increase. In theory, one could defend the thesis according to which natural catastrophes would be less costly if the countries that they strike were better equipped to prevent their effects and resist them. But each tragedy illustrates the limits of this approach. When people suffer and die it is useless to discourse on causes. One must act, quickly and efficiently, and then take the long-term measures necessary for these dramas not to be repeated.

France will take over the chair of the European Union in July. What are your priorities, and with regard to Europe, what impetus can be given to international cooperation for development?

The first thing I'd like to mention is the recent renewal of the Lomé
which was not at all a sure th
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Certain themes call for frequent meetings, while others are satisfied by more widely spaced calendars. Pragmatism must prevail. In no case should states be permitted to use the argument that a major follow-up meeting is useless to exonerate themselves from their commitments.

How do you see the role of the UN and its various agencies evolving in the new Millennium?

The UN and its agencies should be strengthened so that they remain tools of reference at a time when the rules of globalization are being developed. The UN system is in fact the place of international legitimacy. Its purpose is to give impetus to international efforts to set standards and for cooperative actions.

To succeed in this mission the UN and its agencies should pursue their efforts towards flexibility and coherence, while for their part, the member states should assure them sufficient, equitable and regular financing.

But above all, the UN must continue to focus on its goals and commit itself to the struggle for a code of ethics. I am persuaded of this: the 21st Century will be the century of ethics, and the UN's role is to become imbued with this theme, so that the legitimacy conferred on it by treaties is further strengthened by its capacity to respond to the needs of our time. ■

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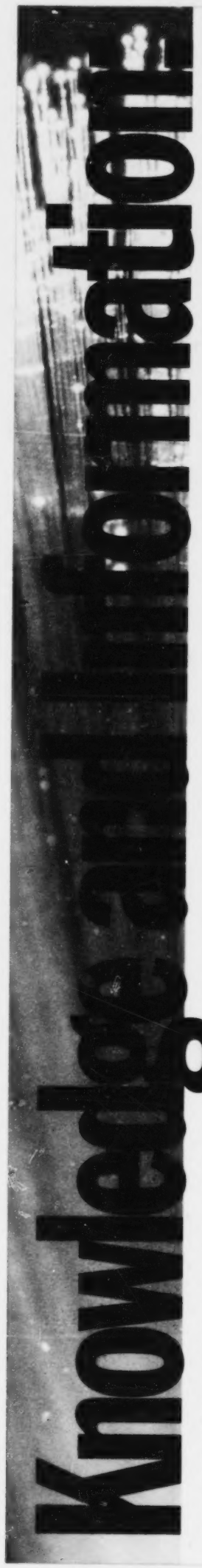


New Levers for Development and Prosperity

By Hans d'Orville

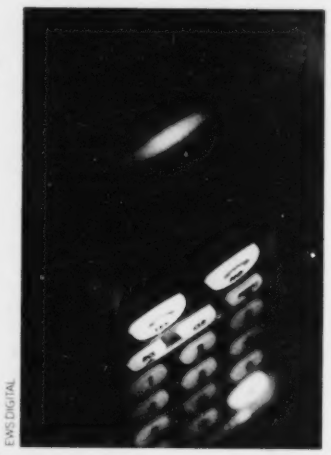
With growing intensity, the information and knowledge revolution is leaving its mark. The "new economy" emerging in industrialized countries suggests that a substantial share of GDP growth is attributable to the information technologies sector. In the developing world, information and communications technologies (ICTs)* are proving formidable and cost-effective development tools. Properly used they can reduce poverty; empower people; build capacities, skills and networks; inspire new governance mechanisms and reinforce popular participation at all levels.

The range of applications is limitless, from electronic commerce, to the empowerment of communities, women and youth; from the promotion of good governance and decentralization, to advocacy programmes, including the observance of human rights; from long-distance education to telehealth and environmental monitoring.

Developing countries must and can seize the "digital" opportunities at hand, as Costa Rica, Malaysia, Peru and South Africa have already shown. But the challenges they face are formidable. Above all, they must bridge an ever more apparent *digital divide*—the inequities created by differences in ICT availability, access, affordability and capacity. The divide runs between North and South, rich and poor, young and old, literate and illiterate, men and women, and urban and rural dwellers. The statistics accompanying this article tell the story in graphic detail.

The potential for *leapfrogging* is a special feature of ICTs that arouses optimism among some development practitioners. It implies that countries and societies can jump across one or more generations and stages of technology. One example is accessing the Net through mobile wireless phones instead of logging on through computers. Another is voice recognition software, which could remove a hitherto insurmountable barrier to the use of PCs by illiterates.

Technical convergence is another feature of ICTs; examples include WebTV, wireless Internet access, and Internet radio. Other exciting linkages are also possible. In Mongolia and Sri Lanka, Internet access points are connected with community radio networks. A facilitator surfs the Net for information sought by the radio audience and then broadcasts the results—in local languages.


EWS DIGITAL

Only in recent years, and cautiously in terms of resources, have multilateral and bilateral organizations begun to focus on the potential of ICTs for development. Since 1993, following the Rio Earth Summit, the United Nations Development Programme (UNDP) has been at the forefront of international efforts in the developing world to provide connectivity, develop capacities and skills, build networks, and generate local content in digitized format. It has also been giving policy and strategic advice for effective IT applications.

UNDP currently operates global programmes, such as the IT for Development Programme, the Sustainable Development Networking Programme and the Small Islands Developing States Network; regional ones, such as the Asia-Pacific Development Information Programme and the Internet Initiative for Africa; and numerous country-level projects.

Based on the needs identified by communities and stakeholders, UNDP has successfully conducted pilot projects involving the creation of multimedia community telecentres or access points in Benin, Burkina Faso, Cameroon, Egypt, Guyana, Honduras, India, Jamaica, Malawi, Mauritania, Morocco, Pakistan and Ukraine. For more information about UNDP's projects, visit the INFO21 website (see page 26). UNDP is also harnessing the power of the Net for its programmatic and advocacy work, including the Netaid.org initiative (see page 24).

Defining strategic objectives

Given the complexity of ICTs—and their potential—it is clear that developing countries require a comprehensive and strategic approach to building national info-structures. The ultimate objective is a knowledge and information society—one with the ability, capacity and skills to generate and capture new knowledge and to effectively access, absorb and use information, data and knowledge with the support of ICTs.

What strategic objectives should developing countries and their partners pursue to build effective national info-structures and to utilize IT for development?

Awareness, advocacy and policy formulation. Decision-makers at all levels must acquire sufficient knowledge about the information and knowledge revolution to formulate effective legal frameworks (e.g., for telecommunications and e-commerce), national action plans and policies; to link ICT deployment with microfinance; and to handle and influence international governance issues, such as Internet domain name management, intellectual property rights and cyberlaws.

Connectivity, i.e., affordable and equitable access to telecommunications infrastructure, ICT hardware, software and networking facilities. Telecoms connectivity is typically provided via fixed landlines, fiberoptic cables, satellite links or wireless connections. The "satellite revolution" holds considerable promise, particularly for developing countries, as theoretically every point on the globe can be reached instantaneously without expensive and

protracted network construction. Likewise, the wireless revolution is gathering steam. Computers and related peripherals (e.g., modems) and software are still prerequisites for connectivity. The "free PC" movement and the use of open systems are other important initiatives for facilitating access, as they reduce cost and thus barriers to entry.

Capacity and institution building. At the institutional level, effective regulatory bodies are needed to oversee the implementation of ICT-related policies (as, e.g., the Universal Service Agency in South Africa). At the human level, training, especially for women and youths, must include basic computer literacy, web-browsing skills, desktop publishing and e-mail, networking, operation of servers and routers, website creation, data selection and interpretation, digital management, and general management and technical maintenance skills.

Local language content and cultural diversity. English dominates the web (80 percent of all websites are in English), as well as the digital content market, including CD-ROMs. If ICTs are to be mainstreamed in the developing world, and local knowledge is to be shared, content in digitized form must also appear in local languages. The creation of "knowledge broker" and solutions websites, i.e., one-stop shops with hyperlinked access to structured and pre-selected sites, would help reduce search time as well as usage costs.

Creative solutions to connect the unconnected. Industry should be encouraged to become more responsive to the systems and hardware needs of developing countries. The lack of energy grids in many developing countries calls for solar- or dynamo-driven computers and hardware. Such equipment must be able to withstand sand, humidity and other external influences. Likewise, iconographic software programmes would facilitate ICT use by illiterates.

Systematic efforts are also required to create a web of digital community telecentres (also called multimedia access points, technology access centres, telecabinas, cyberkiosks, cyber cafes, etc.), especially in rural areas. They are conceived as platform and hub for various development applications, community training, capacity development and web content creation (in local languages). To accommodate e-commerce, novel transaction and payment procedures must be devised to cope with weak banking infrastructure and the non-availability of credit cards.

E-governance frontiers

The dynamic interaction between knowledge, information and ICTs opens up new frontiers. Various aspects of "e-governance" are quickly gaining ground, not only in industrialized countries but also in many developing ones. They relate to:

- Enhancing democratic and parliamentary institutions, mechanisms and practices (e.g., parliamentary online services, networks and information-sharing, the creation of government websites);
- Strengthening transparency and accountability (including a decentralization of government functions, online public tenders and procurement, land transactions, and internet transmission of meetings of legislative and executive bodies);
- Improving government activities (by creating inter-ministerial networks) and aid coordination (through online observatories with consultation and posting of data, documents and studies);
- Improving the delivery of government services (by opening public cyberkiosks; posting online basic documents, forms, statistics and bulletins; providing online national registers; and options to pay government fees and invoices);
- Fortifying the observance of human rights through monitoring, networking among interested groups, awareness programmes, and online education.

What will it take?

Immense resources—both in cash and kind—are required to create a more level playing field for developing countries in the global knowledge society. Public-private, bilateral and multilateral partnerships hold considerable promise. The private sector should be encouraged to contribute its expertise and resources towards bringing the information revolution to the unconnected and underserved regions of the world. For their part, multilateral and bilateral organizations must match their recognition of the importance of knowledge and information in the development process with much more funding for practical programmes. ■

Hans d'Orville is Director, IT for Development Programme, Bureau for Development Policy, UNDP.

*ICT refers not only to the internet, but also to other tools, such as CD-ROM, television, video and (digital) radio and satellite technologies. (CD-ROMs can carry the content of hundreds of Internet sites on a single disk.)

EWS DIGITAL

CYBER FACTS

We are irrevocably on the road to the e(lectronic)-economy, the i(nternet)-economy, the k(nowledge)-economy and, ultimately, the m(obile)-economy.

▸ The cost of going online ranges considerably: from US$18/month in Sweden to $78/month in Argentina. Internet access for one hour costs $10.50 in Chad, where the average annual GDP per person is $187.

▸ By end-2002, there will be one billion mobile phone subscribers.

▸ By 2003, there will be an estimated 79.4 million browser-enabled mobile phones (with Internet access), up from 1.1 million in 1999.

▸ E-business will account for 10 percent of the world's GDP by the year 2005.

▸ In industrialized economies, about 25 percent of consumer spending and 70 percent of business-to-business spending will be influenced by the Internet.

▸ In 2000, 94 percent of all online transactions will take place in the developed world, that is a 19:1 ratio against Africa, Asia and Latin America.

▸ India's software exports are expected to grow from $4 billion at present to about $100 billion by 2005.

▸ By 2005, global demand for specialized IT skills will outstrip supply by 20 percent.

▸ NTT DoCoMo, Japan's mobile phone operator, is the world's largest telecom company with a capitalization of $370 billion.

▸ The Asia-Pacific PC market, excluding Japan, grew 35 percent in 1999 to 14.1 million units, while the number of Internet users jumped from 12.9 million to 21.8 million; within another five years, the total is expected to reach 95 million.

▸ In Bangladesh, an investment of $80 million by Grameenphone has provided cellular phone service to rural areas, covering 100,000 subscribers in 250 villages.

Sources: Gartner Group, NUA Internet surveys and News, Africanews, Inktomi, asia.internet, ecommercetimes, Financial Times, Jupiter Communications, Cnet, Forrester Communications, PC Magazine, Far Eastern Economic Review, Hindustan Times, IDC, Forbes.

ESTONIA'S

PHOTOGRAPHS BY JACQUELINE MIA FOSTER/UNDP

▲ View of Tallinn.
▶ "ENTER," Tallinn's only Internet cafe.

Tallinn, Estonia—How many countries in the world, let alone in the ruins of the Soviet empire, would dare declare Internet access a human right? Leave it to Estonia, the tiny nation of 1.5 million on the Baltic Sea, to make such a bold proclamation. Earlier this year, in a move considered the first of its kind in the new digital world order, Estonia's parliament voted to guarantee Net access, just like any other right, to its citizens.

Not that the resourceful Estonians needed any encouraging. In its first years of post-Soviet sovereignty, Estonia has become the most cyber-oriented state to emerge from the collapsed Soviet Union. Thanks to an explosive growth in personal computer ownership, today more than one in 10 Estonians use the Net—a higher rate, in relative terms, than in France or Italy. Thanks to a state crusade led by Estonia's President, Lennart Meri, the whole country is being wired—from the National Library in the capital, Tallinn, to the most remote pastoral corners.

In the national campaign, launched by President Meri in 1997 and sponsored in part by the United Nations Development Programme (UNDP), more than 80 public Internet access sites, cyber visitor centres where Estonians can surf the web and use e-mail for free, have opened. UNDP led the drive, opening the first four public access points. A total of 300 are planned by the year 2002.

The prime mover of the crusade to wire Estonia—code-named "Tiger Leap"—is President Meri, who even answers his own (publicly advertised) e-mail address. In 1997, Meri helped to create the Tiger Leap Foundation, an effort that united the Ministry of Education and Estonia's computer companies.

"We played a role in making Internet access a human right," explains Petra Lantz-de Bernardis, UNDP Resident Representative in Tallinn, "It grew out of a government request in 1997 for help in developing Estonia's information technology (IT). "They came to us with a question," recalls Lantz-de Bernardis, "'How do we best invest in human capital?'"

"This is a small country, with limited natural resources that is suffering a negative population growth," adds Robert Juhkam, the UNDP programme advisor in Tallinn who led the development of a framework document, bringing together IT experts from the local private sector and government. "Human capital is their greatest strength."

The UNDP's investment in the project has not been costly—US$200,000 to date—but the dividends have been great. The framework document became the basis for the country's new telecommunications law. "The government," Lantz-de

'TIGER LEAP' TO TECHNOLOGY

Bernardis reports, "adopted verbatim all of our suggestions."

An Internet lifeline

The small blue and white road sign—announcing "Internet 100 metres"—looks a bit out of place on the rustic island of Hiiumaa in the middle of the Baltic Sea. The sign, just one of many that dot the island, reveals the proximity of one of Estonia's first public access points. Personal computers first hit Hiiumaa's main library in 1997 and the 106-year-old book repository has never been the same.

Life on Hiiumaa—population about 12,000, territory just under 1,000 square kilometres—has never been leisurely. The island's history of farming and fishing dates back to the 13th Century. But Estonia's first years of post-Soviet sovereignty have not been terribly kind to Hiiumaa. Farming is down. Fishing has been hit hard as a result of turbulent markets in Russia and Ukraine, where 80 percent of the fish

canned on Hiiumaa is sold. And eco-tourism remains a dream. The dense forests that cover two-thirds of the island are pock-marked with patches clear-cut in the rush for fast cash. Worse still, the tide of youth emigrating to the mainland has only risen since Estonia won its independence.

On Hiiumaa, however, the Net is spawning more than cyber pen pals. In a triumph of technology over geography, the Net has lent the island a lifeline, helping it to overcome many of the traditional obstacles of isolation.

Vaike and Valdo Laid's farmstead on Hiiumaa's north coast is one place that will never be the same. The family farm, a small quadrant shared with a handful of horses, cows and piglets, was one of the first locales transformed into a Net visitor centre. Long a hub of news for local villagers, the Laid farmstead served as a post office during Estonia's brief independence before Soviet annexation in 1940.

So when UNDP officials suggested plugging in a computer in the Laid's old granary storage room, Vaike and Valdo stepped into the digital age with ease. "We didn't know what it all meant," says Vaike, "but when the lines formed at our door, we knew our farm had joined the rest of the world."

Hiiumaa, not coincidentally, boasts a fibre optic cable that runs along the floor of the Baltic Sea to Stockholm, some 250 kilometres to the north. In 1997, Telia, the Swedish telephone company, laid the cable to connect St. Petersburg with Stockholm. But as Telia partly owns Estonia's telephone company, they also operate the cable in Estonia. Hiiumaa

By Andrew Meier

PHOTOGRAPH BY JACQUELINE MAFOUD/UNDP

ESTONIA'S 'TIGER LEAP' TO TECHNOLOGY

officials were asked whether they would allow one of the switches to be located on the island and they agreed.

Imported technology, wedded with an indigenous ingenuity, has helped Hiiumaa to overcome its isolation and to reduce the instability of its traditional trades. Consider how the Net has changed life for Toomas Kokovkin, an Estonian geographer who moved to the island a decade ago. Working from a gleaming hi-tech office, he is able to earn a living as a digital cartographer. One recent order came from a Swedish company that hired Kokovkin to digitize a stack of hand-made maps of Uganda. The exchange was conducted entirely via the parties' web pages. "It makes great sense for us and the Swedes," says Kokovkin, "we offer cheap labour for the same quality product, and they give us the means to keep on living on the island."

▲ (Top) Mainland viewed from the ferry. (Above) Estonian geographer Toomas Kokovkin.
▶ Grandma Vaike and grandson Randar II at the computer on their farm.

Extending the cyber crusade

The state guardians nurturing Estonia's fledgling democracy believe the Net will be a cornerstone of liberty. Tiger Leap's first goal—"A computer for every 20 pupils"—fast grew into a national slogan. With that mark within reach, Estonia is moving on. Prime Minister Mart Laar hopes to create "a virtual government" in a cyber downsizing that aims to replace bureaucrats with online services.

Estonia also boasts a state IT advisor who attends cabinet meetings and guides the country's cyber course. Linnar Viik, the Net guru who was one of the architects of the Tiger Leap campaign, is a celebrity in Estonia. "We're not just making idle declarations," Viik says. "We're building a public domain infrastructure—with equal access and equal pricing for all."

Thanks to the state's digital crusaders, Estonians enjoy a wide range of online government services. "What we are attempting to do," says Viik, "is to make the entire legislative process transparent and give people an opportunity to comment on the laws beforehand and publicly."

Estonia's state portal is scheduled to go into operation in August. But at present 280 public services are already available via the Net. The Ministry of Finance posts the state's daily accounts on the web. And this spring, Estonians began to submit their taxes via the Net.

Estonia's cyber crusade may be ambitious, but it is not a romantic fancy. The community Net centres not only lure Estonians to the Web, they also act as a catalyst for economic development. Consider the rapid rise of Microlink, Estonia's leading computer manufacturer. Founded in 1995 by a pair of college drop-outs, Microlink is run by a 32-year-old Chief Executive Officer, Allan Martinson, who makes no effort to hide the secret of his company's success. "I don't know why so many people fear globalization," he says, "I love it." Microlink, Martinson explains, has benefited from orders outsourced by neighbouring hi-tech giants in Finland, Norway and Sweden. Moreover, Microlink is 40 percent owned by Finnish and US investment funds.

Microlink also runs the most popular portal in the Baltics (Delfi.com). With news, debates and e-commerce, the site claims to have upwards of 200,000 hits a day. Microlink, however, also shares the public service streak of many Estonian dot.coms. Its latest product line includes sleek stand-alone computer terminals (a metal podium topped by a large-screen touch-activated monitor) that are now being installed in the foyers of state ministries for public use.

Estonia's e-boom only threatens to grow. A leading Estonian bank, Hansabank, reports that an astounding 85 percent of all clients' transactions are made over the Internet. Local versions of eBay (where farmers are offering their potatoes and squash) and Amazon.com are cropping up. Web design outfits are sprouting across Tallinn and working for clients worldwide. Still, Estonia's Net entrepreneurs are well aware of the greatest threat: the dearth of native venture capital. "Many of our companies depend on Finnish, Norwegian or Swedish big brothers," says Viik. "Estonian e-commerce needs Estonian venture capital," adds Martinson.

Estonia also remains plagued by the flight of its youth and scientific experts, who seek education and employment abroad. Viik is convinced that the Net will help staunch this haemorrhaging of the country's intellectual capital.

This fall, a new IT college for the digital arts and sciences will open in Tallinn. There will be no shortage of applicants among Estonia's first post-Soviet generation. Recent surveys of children between the ages of seven and 14 reveal a remarkable digital aptitude among Estonian youth. "For our young people," Viik says, "the Net is like electricity. For them, the main thing is openness. They know no borders."

"Estonians had been disconnected for so long," adds UNDP's Lantz-de Bernardis, "but now they're one of the world's leaders in connectivity. The Tiger Leap programme is not simply about surfing the Internet. It's about access to information. It's about democracy." ■

Andrew Meier writes widely on the former Soviet Union.

PERU'S GOVERNMENT GOES HIGH TECH

By Georgia Scott

Lima, Peru—One evening, a few months ago, Enrique Normand, a partner in the law firm of Estudio Rubio, Leguia, Normand & Associates, was finishing up contract negotiations between a Peruvian company and a group of US investors when he realized they were missing a crucial document. They needed to obtain it from the Oficina Registral de Lima y Callao (ORLC), the notoriously slow public registry for Lima and its seaport, Callao. In short, they needed a miracle.

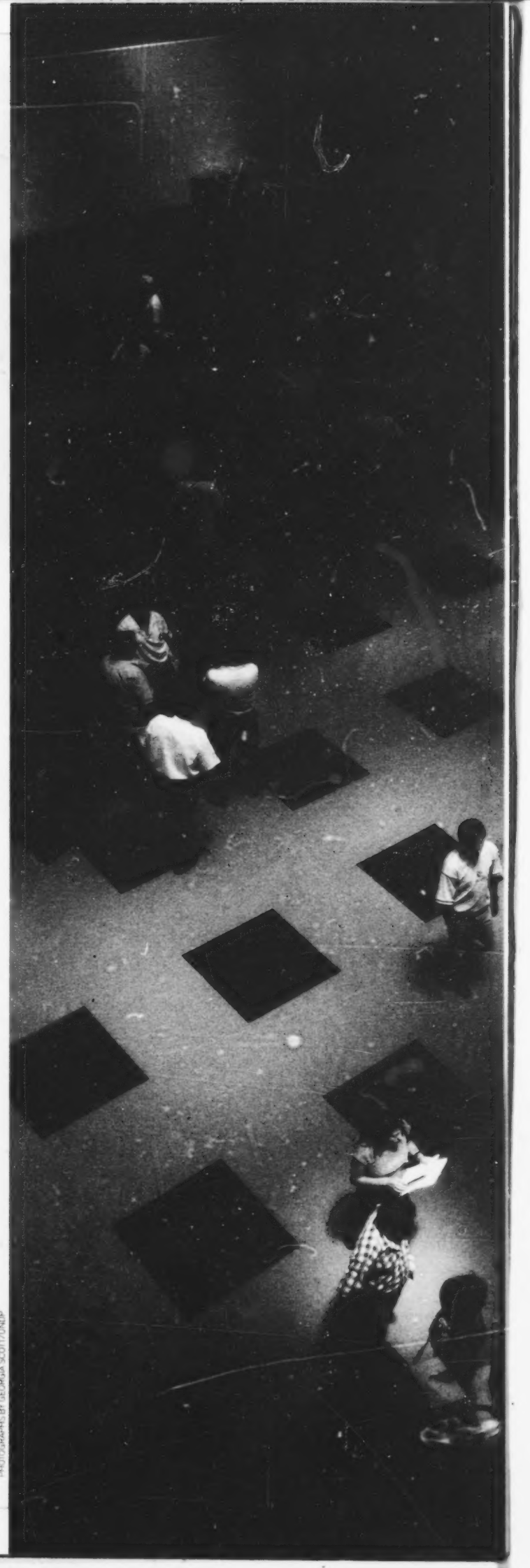
The ORLC, an independent government agency, is the only place one can verify the legal status of property, including businesses, homes and personal estates. Historically, getting the required information in less than three to four weeks had been impossible. But thanks to ORLC's new website, the document Normand needed to complete the US$100 million deal was available with the touch of a computer key. The website was set up by a team of technology experts with a $400,000 grant from the United Nations Development Programme (UNDP).

Back to 1888

Peru's public registry—and many of its problems—have existed since 1888. The last major change at the registry was in 1970 when it graduated from handwritten to typed records. The agency's many problems—such as the length of time it took to send a certificate and the illegal sales of homes to more than one buyer—were well known, but viewed as an unfortunate reality.

In 1995, Hernán Martínez was hired as chief of ORLC. In an interview with CHOICES in his third floor office overlooking ORLC's busy lobby, he admitted that "no one in Peru thought it was a good system, but no one had any idea how to make it better." That same year, he met Vincenzo Puliatti, programme manager for UNDP's Programa Nacional de Informática y Comunicaciones (PNIC). PNIC was established in Peru in 1992 as part of a larger programme to bring technology to Latin America. It began as a one-man operation with a small office inside the Ministry of Foreign Affairs. Now, Puliatti has a staff of nearly 70 people

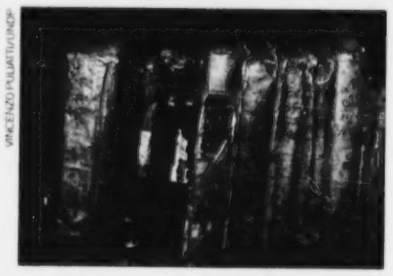
Hernán Martínez looks at a Spanish register from the 1600s kept in the ORLC.



The lobby of the ORLC.

PHOTOGRAPHS BY GEORGIA SCOTT/UNDP

GEORGIA SCOTT/UNDP



VINCENZO PULIATTI/UNDP

Daniel Sernagué, a local businessman, hokis his certificate (a computer-ized printout from the new automated system) outside the ORLC.

▼ Spanish registries from the 1600s.

and PNIC has established computer networks and communication facilities for several government agencies, including the Ministry of Foreign Affairs, the National Institute for Consumer Defense, the Ministry for Women and Human Development and the Ministry of Justice. Besides the initial grant of $400,000, PNIC raised more than $6 million in cost reimbursement contributions from government agencies.

With the help of Puliatti, Martinez did what no one imagined could be done: he automated the entire agency, created a user-friendly website *(www.orlc.gob.pe)* and instilled confidence in a new generation of customers. The process took longer than expected—four years—and cost more than $11 million, which was paid by ORLC. It involved, among other things, purchasing 600 computers, transferring volumes of centuries-old handwritten inscriptions onto more than 500 optical disks and establishing an elaborate fingerprint recognition system (to satisfy a long-existing law that all certificates bear the signature and seal of a certified registrar).

Everyone seems quite pleased with the results. "This is the first automated public registry in Latin America," Martínez said proudly. "Other countries, such as Cuba, Panama and Venezuela, have approached us for advice."

Saving time and money

Jorge Eduardo Orihuela, a local notary, delights in being able to access ORLC's files electronically. Like Normand, he can register or verify the value of a piece of property, check on the status of a certificate and trace the ownership of a plot of land from his home or office.

"You don't need to be an expert to navigate the site, which means that even I can use it," says Orihuela. He has also noticed important changes both in the way ORLC employees do their job and in the certificates they give out. "The organization has improved, from management to services. Before, the information was stored in huge books, and it would take many days to get hold of a document. Maybe someone else had the book you needed, or a page might have been torn out. Now, the system is safe and many people can share information at the same time. It makes my job—and my life—much easier."

Even if a customer does not have a personal computer, the benefits of the new system are enormous. PNIC, which created the blueprint for the project and executed much of the work, has set up a sophisticated computer network that allows ORLC employees to retrieve information quickly for walk-in customers. Daniel Sernagué, a local businessman seeking a bank loan, went to the agency recently to get a signed certificate. "I remember once, years ago, I paid for something to be done right. I came back a month later and it was still wrong," he says, "but today, I can get my certificate as soon as I pay for it."

One of many improvements

Another of PNIC's revolutionary projects came toward the end of 1993, shortly after Puliatti met Miriam Schenone, then the Vice Minister of the Ministry of Justice. Schenone had been talking to UNDP about making the information required by the local judiciary more accessible. "The various ministries were in a chaotic situation, and I was frustrated at not being able to get things done," she said. "UNDP asked Puliatti to join us for a meeting. I didn't know what he could do to help, but I could see a commitment and decided to take a chance."

Within a year, Puliatti's team had established a computer network for the ministry and created a website *(www.minjus.gob.pe)* for accessing all of Peru's current laws and their relevant predecessors. Complementing the website, an ongoing series of CD-ROMs were developed that stored all current laws, as well as inactive ones, once they had been removed from the website. "Before the CD-ROMs," said Schenone, "the Ministry of Justice had an index system that only identified the book a law was in, but did not tell you what the law was, or give any background on related laws from the past."

To illustrate the impact of the CD-ROMs, Schenone told a story about a recent trip to Spain on business. "When a question came up about a Peruvian law," she said, "I pulled out a CD-ROM and said 'Give me a minute. I have it right here.' Everyone was so impressed."

PNIC's involvement ended shortly after the first CD-ROM was produced, a project which took six months and cost $8,000 plus personnel, all of which was paid for by the Ministry of Justice. "We moved on once the system (Sistema Peruano de Información Jurídica) became self-sustaining. The CD-ROMs are sold to interested users at an annual fee of $400 (for which they get one CD-ROM a month), and are distributed free of charge country-wide to all judges and attorneys, even in rural areas where they cannot afford to maintain an updated legal library," says Puliatti.

In December 1999, PNIC's programme in Peru was completed successfully. The team from PNIC created an international non-governmental organization on information technology for development and a website (*www.it4dv.org*) to reach new constituents. "Technology is constantly evolving," says Puliatti, "and therefore one has to continue to build on it. UNDP left behind a solid model in Peru, and I hope that similar initiatives can be implemented in other countries." ■

Georgia Scott is assistant art director at The New York Times. *Her articles have been published in* The New York Times *and* Essence *magazine.*

INTERNET ON WHEELS

MOBILE INTERNET UNIT

By Siew Lyn Wong

Sungai Pelek, Malaysia—Zulfendi Zulhisam has an ancient heritage, one of dream-inspired spirit wood-carvings and animist ceremonies. The 13-year-old, a Malaysian aboriginal *(Orang Asli)* of the Mah Meri tribe, lives in Sungai Pelek village, a three-hour drive from the capital Kuala Lumpur. Zulfendi's aspirations contrast with his setting. He wants to be an engineer when he grows up. But first, he declares, "I want to learn how to build web pages."

His interest was sparked when a huge silver bus, or Mobile Internet Unit, started visiting his school in Sungai Pelek. Inside the bus was an exciting new world: rows of monitor screens, trendy headsets and buttons that prompted silver disks to pop out. It was his first encounter with computers. After 10 sessions of basic computing and Internet skills, the precocious Zulfendi stated that while he was initially scared of computers, "I'm used to them now."

Zulfendi is among 2,400 students and 400 teachers in the state of Selangor who are part of a pilot project to promote information and communication technology (ICT) initiated by the United Nations Development Programme (UNDP). The project is being undertaken in 20 rural schools that lack the resources to

Students ready to board the Mobile Internet Unit.

PHOTOGRAPHS BY JOHN CHRISTOPH

Boys looking on as the girls use the computers of a Mobile Internet Unit.

offer computer training. Begun in August 1999, the Mobile Internet Unit is bringing information technology, in 10 one-hour lessons, to help students and teachers acquire electronic skills. The project will be evaluated with the aim of replicating it in other parts of Malaysia and throughout the Asia-Pacific region. Although a pilot project that caters to rural areas, the idea has been taken up by the Kuala Lumpur Municipal Council to benefit poor schools in the capital.

UNDP, the Malaysian government and the private sector are partners in the US$420,000 one-year project. UNDP provided a grant of $75,000 through the Asia-Pacific Development Information Programme (APDIP). The government committed $182,000, which, together with the UNDP grant, is being used to plan, execute and evaluate the project through Mimos Berhad, the technology development arm of the Ministry of Science, Technology and Environment. These funds also financed equipment purchases, including 20 Pentium III personal computers; top-of-the range peripherals, including digital headsets and cameras; and colour laser printers; as well as the latest word-processing, spreadsheet and Internet software.

The Automotive Corporation Malaysia, a private company, provided the balance of funding by donating the $163,000 built-to-order bus. Other project partners—the Selangor State Education Department and the Selangor State Library—are supplying reference books.

For these children happiness is a bus with a silver lining.

Bridging the rural-urban gap

Like most developing nations, Malaysia has always been concerned about bringing its large rural community—half the population of 21 million—into the mainstream of development. The economic split between rural and urban areas has widened following a decade of 10 percent per annum GDP growth in the 1990s. Furthermore, the government has identified ICT as key to achieving developed nation status by the year 2020.

The "digital divide" is evident in the educational system. "In every school we visit, there are children so afraid of the computer that they refuse to even touch it," says the Mobile Internet Unit facilitator Ho Mun Yuen. "I have to assure them they won't break it, or have to pay if something goes wrong."

In the Sungai Rawang School, which Zulfendi attends, the four computers available are reserved for teachers and office staff. Zulfendi's family will probably never be able to afford a computer—his father harvests oil palm fruits, while his mother runs a small store. In contrast, it is not difficult to find an urban Malaysian child of Zulfendi's age who has his own homepage and goes online for computer game battles with children halfway around the world.

Mohamad Hafiz Kamarudin, 16, grew up in Penang City. However, he moved to Sungai Pelek when his father was transferred there. "In Penang, you learned how to use the computer because everyone did," says Hafiz, who has a pet cat called Printer. "But when I came here, there weren't any lessons I could take. My father's company encouraged every employee to buy a computer, so we have one at home. But I only used the computer to surf the Internet and help my father do paperwork. The mobile unit was great because I got the chance to learn more about the Internet and how to build web pages," he says. He hopes to major in accountancy or computer science at university.

The Mobile Internet Unit caters to students at all levels of ICT exposure, says project manager Kang Wai Chin, a specialist in computer education. "We determine their computer skill level during pre-course tests and encourage those who are more advanced to help the beginners." The more computer savvy, such as Hafiz, are taught advanced skills, and are earmarked as future webmasters of the computer clubs that schools are encouraged to form.

The project's origins

The mobile unit concept came from Africa. APDIP regional coordinator Gabriel Accascina explains, "In Mali, in the early 1980s, I worked on an interesting project called the Mobile Video Unit, which educated large numbers of people in rural areas about local problems and their solutions. A little bus with a mini movie theatre, or a truck with a television at the back, went from village to village for two or three months. At each stop, the facilitators handed out brochures, started the generator and showed a video on agriculture, or on how to deal with HIV/AIDS, or some other issue. I thought it natural to extend this idea to the ICT programme and use a mobile unit for teaching students about the Internet."

"For the Mobile Internet Unit, the data-gathering and evaluation aspects of the project are paramount in view of plans to replicate it locally and throughout Asia-Pacific," says Accascina. Written and verbal evaluations are carried out before, during and after the training, using methods worked out by APDIP, Mimos Berhad and a specialist at University Malaya. "Malaysia is a very good source of information for a model to determine project cost-effectiveness because there is a big drive here to become a centre of excellence for information technology," according to Accascina.

Hence the consistently enthusiastic response to the mobile unit. For instance, when the bus visits Syed Mashor School in the small town of Batang Kali more than two hours north of Kuala Lumpur, students clamour to board it. "It's a golden opportunity for us," says teacher Abdul Razak Yusoff, who is also the secretary of the Parent Teacher Association (PTA). "We've only heard about the Internet—about 50 percent of the country doesn't know what it is. Especially in the rural areas, there can be a sense of being left out. In this school, the PTA pushed for a computer club and for the children to attend lessons."

The next step

"In an age of globalization, if we are not careful, access to information technology will intensify the tendency for the poor to become poorer and the rich richer," says Philips Young, UNDP's Resident Representative in Malaysia. "When the price of information was the cost of a textbook, it wasn't a very expensive learning tool to acquire. But most of the poor can't afford computers. So what we're providing with this project is an entry point."

The next phase of the project is being worked out with the schools, says project manager Kang. Mimos Berhad is donating one personal computer to every project school, with a free Internet account and free server space to host websites. "Through their computer clubs, we'd like to see these kids teach their friends what they have learned. We encourage schools to keep in touch with us via e-mail, to check for the latest news on our Mobile Internet Unit homepage, and send us their updates. And we'd like to see every school put up its own homepage," says Kang.

As Accascina points out, those who start early, who grow up with the technology and live with it, are most likely to recognize and seize its opportunities. The mobile unit is offering that chance. In fact the Malaysian government was so pleased with the programme that it has decided to use the Mobile Internet Unit as an e-learning project and to expand it from the existing four coaches to 20. ■

Siew Lyn Wong is a Malaysia-based freelance writer who specializes in technology, travel and the environment. Her work appears in national dailies, including The Star *and* The Edge. *She is the author of* The Malaysia Internet Book.

A Mobile Internet Unit facilitator shows a student the magic of computers.

NET ACCESS FOR DEVELOPMENT

In October 1999, the tiny island nation of Tuvalu was connected to the Internet. Four months earlier, the small mountain kingdom of Bhutan acquired access. It was not merely a case of two more countries jumping onto the e-world bandwagon. Both happen to be remarkable for their extreme isolation—the former is surrounded by the vast South Pacific Ocean, the latter by the formidable Himalayan peaks.

Aiding these achievements was the Asia-Pacific Development Information Programme (APDIP), a UNDP initiative started in 1997 and implemented by the United Nations Office for Project Services, Asia office. "Helping to connect Bhutan and Tuvalu is significant because these countries, although very small and remote, have the potential of raising their national income with Internet-based activities," says APDIP regional coordinator Gabriel Accascina.

Based in Kuala Lumpur, APDIP assists governments in 42 countries in the region to use information and communications technology to promote social and economic development. APDIP started with a $3.7 million budget for 18 months, but plans to extend its work beyond 2000 with financial support from and in partnership with regional governments, the private sector and UNDP country offices.

"Our Internet strategy demonstrates how access to information can bring about significant change," says Accascina. For example, farmers in developing countries can use information technology to access the latest prices for commodities that they produce or need to buy. The information arrives at a community centre, which houses the computer, then gets disseminated by word of mouth, or is posted in a public area. "This information is crucial for farmers," says Accascina, "as it cuts out the middleman and vests farmers with bargaining power, enabling them to get the best prices. It is one of the most effective ways out of poverty."

APDIP has networked research centres for farmers and is trying to replicate this approach throughout the region. "In Bhutan, we have set up a small network connecting six or seven provinces. In India, we're trying to do the same with a group of women farmers. And in Mongolia, we have helped set up citizen information centres in remote areas to service a large number of people, so they can choose when and at what price to sell their produce," says Accascina.

"However, capacity building is needed most at the governmental level for Asia-Pacific countries to adopt information technology. This basically means giving decision-makers an idea of what this 'revolution' is about," notes Accascina.

A key aspect of APDIP's approach to capacity building is to foster regional cooperation and the sharing of experiences. "For instance, when Iran was starting to develop its information technology policies, officials from Malaysia, which already has a National Information Technology Agenda, visited Iran. The two countries worked together. This exchange is probably one of the most important aspects of what we do," says Accascina.

APDIP also works to build public-private sector partnerships. One project is the establishment of networking academies in nine countries, a joint non-profit technical training initiative with Cisco Systems, a world leader in networking for the Internet. APDIP would like to supplement this work with projects such as the Mobile Internet Unit. "The important thing for us," says Accascina, "is to build bridges that link people and expertise across gaps that are potentially being widened by technology. Then, we may be able to level the playing field to enable developing countries to take part in the global economy."—*Siew Lyn Wong*

AN ISLAND CAUGHT UP IN THE WEB

Kingston, Jamaica—In a small building on a remote Jamaican fishing beach, the Jamaica Sustainable Development Networking Programme cybercentre is filling up with people wanting to use its three computers. Fisherman Damian Jones, 21, checks the Internet for local weather reports. Twice a day he offers the information he finds to other fishermen, and about 20 make use of his free service. "Some of my friends can't read. Since I am checking on the weather, why not share what I find. It unites the community," he says.

By Barbara Blake Hannah

The Caribbean island nation of Jamaica provides an excellent example of how a national partnership with the United Nations Development Programme (UNDP) is helping even remote communities to have access to computers and the Internet.

The Jamaica Sustainable Development Networking Programme was established in early 1998 as part of UNDP's global network for disseminating information on sustainable development. Valerie Gordon, a science graduate from the University of the West Indies, is the programme's national coordinator. Her initial task was to set up six cybercentres of three or more computers to offer information technology (IT) access to communities in rural areas.

Recognizing IT as offering almost unlimited job potential, the Jamaican government has identified the acquisition of IT skills as the most important national objective for its 2.5 million people. In December 1997, the government created a new Ministry of Commerce and Technology, which is headed by Phillip Paulwell, a bright young lawyer who had distinguished himself as Minister of State for Industry and Commerce.

Over the last two years, Paulwell focused Jamaica's attention on technology so successfully that he was named "Man of the Year 1999" by the island's leading newspaper, the *Daily Gleaner*. At the August 1998 launch of the networking programme, he said: "Given that national computer literacy is the government's chief goal, I cannot emphasize too strongly how grateful we are that UNDP has come on board to help us in such a practical way."

According to UNDP's Resident Representative Gillian Lindsay-Nanton, "UNDP is very pleased to play a catalytic role in bringing information technology to the Jamaican people. But this is just a start—the challenge for policy makers, the business community, representatives of civil society and development partners is to create an environment for strengthening the knowledge base and maximizing the benefits of information and communications technology."

UNDP provided US$105,000 for the project and the Jamaican Government Planning Institute contributed $140,000. A pledge of cooperation came from the Jamaica Library Service, which has many island-wide branches, and another from the Bluefields Peoples Community Association, a successful community development project.

A fishing village surfs the Net

Bluefields is a fishing village on a beautiful but isolated stretch of Jamaica's southwestern coast, which has yet to be exposed to tourism. The remoteness of the village has stunted its development, resulting in urban migration, a high level of illiteracy among those who remain, and few means of earning an income, except by small farming and fishing.

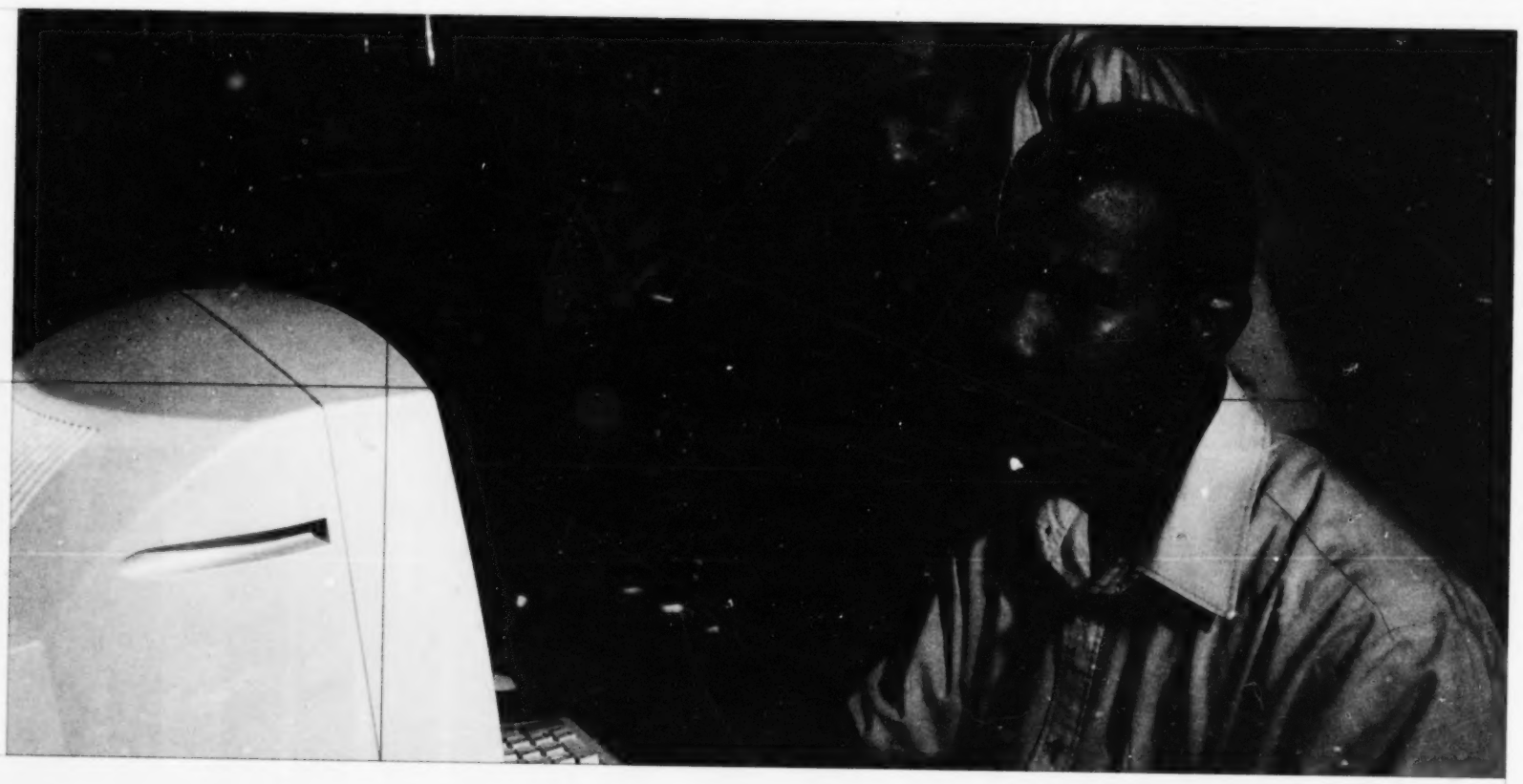
Eleven years ago, Terry Williams, a native of Bluefields, returned to his community after 23 years in England. He wanted to give something back to the community where he was born. Williams describes himself as a "social entrepreneur" and believes that community development is the foundation of national growth. He acquired funds for a community centre, equipped it with sewing machines and persuaded voluntary agencies to send tutors to teach the community. He and his wife Taina direct the activities of the centre and welcomed UNDP's technology project—which was given space in the centre—as another means of furthering the development of the village.

Taina Williams, the centre's coordinator, oversees a staff of eight, including two British Voluntary Service Overseas volunteers and one American from the Peace Corps. "The technology project gives opportunities to people who would never have them otherwise. It's about taking people from an underdeveloped area and plunging them into first world technology. They're beginning to understand that this is not something beyond their grasp. Interaction with the new technology draws them into other activities, such as our adult literacy and environmental protection programmes," she says.

In the three months since its inception, more than 250 children have become computer literate. One of them 12-year-old Sasha Gaye Forrester, with skin like polished ebony, is a favourite of the community centre staff, who have sponsored

PHOTOGRAPHS BY STEPHENIE HOLLYMAN/UNDP

Postal Service employees using the Internet at the Liguanea CyberCentre in Kingston.



her schooling since she was a toddler. Access to computers has increased her educational options. Forrester speaks shyly of the four friends she corresponds with by e-mail, and of the games she plays on the computer. Her fluency with computers encourages others her age to try their skill. Most begin with typing and e-mail. UNDP's Gordon hopes to bring tutors into the programme to teach more advanced technical skills.

"Computers facilitate development in many areas, such as teaching management skills and helping one to stay on top of things," says Logan McIntyre, a goat farmer. "If I ever want to find information on medicines for my animals, I can get it right there," he adds, pointing to a computer.

A library goes online

The mountain community of Brown's Town is home to nine schools. At the Branch Library teenagers read books as they wait to use the computers provided by the Jamaica Sustainable Development Networking Programme. With charges of JA$100 ($2.50) per hour, two to three students share the cost of half an hour on the Internet.

The library employs 22-year-old university graduate Adrian Vickers as a computer training assistant. "This facility is mostly used by students who have heard about computers but have never had a chance to use them," he explains, "so I give them a trial run to get them interested in learning more." Vickers says computers are making a difference in education: "Now we have a backup; if the information is not in the book, you can go to the computer."

Barbara Moss, an assistant teacher at the Brown's Town Basic School, logs on to the Internet regularly at the library to get ideas for teaching. "Computers increase the kind of information I can get for my five-year-olds," she explains. "I find new and different ideas that hold the children's interest and make lessons easier, so the children enjoy school more."

Maureen Forrester, another teacher, helps her husband Delroy use the computers at the library to find national and international information to support and improve their backyard bee-keeping business.

CyberCentre in the suburbs

Another example of the UNDP-supported project is the 13-computer CyberCentre on the grounds of the Post Office at Liguanea—an upscale suburban area in Kingston. Located within easy reach of the city's five major high schools, the CyberCentre has been endorsed by Prime Minister P.J. Patterson as an important component of Jamaica's IT strategy. It provides courses for schoolteachers and students, as well as technical training for workers involved in the national plan to install e-commerce computer boutiques in the island's post offices. Equally important, the CyberCentre is also the hub that supports the rural technology centres.

Liguanea's Deputy Postmistress Novlette Wallace took one of the training courses. "It should have been longer, but it was very informative. I can't wait to get computers in the post office now," she says.

Though much has been accomplished in the two-and-a-half years since the project started, UNDP's Gordon says this is just the beginning. "We need funds to expand the programme beyond its present six locations, because it is critical for our people to learn the skills to harness technology and compete in the global market." ■

Barbara Blake Hannah is a journalist and the director of TechSchool 2000, (http://techschool.hypermart.net) *a Jamaica-based cyberschool for teenagers. She has been a reporter for the BBC, Channel 4 and THAMES TV.*

(Top) Students at the Brown's Town Branch Library surf the net. (Below) Dwight Wallace, an accountant, often visits the Brown's Town Branch Library to get information from the Internet.

Information Empowers WOMEN

By Tamfu Hanson Ghandi

PHOTOGRAPHED BY AFWA LUCAS WENGANG/UNDP

Mbouda, Cameroon—When Fossi Yoni Mireille, 22, dropped out of secondary school two years ago, her future was bleak. She became pregnant and married her boyfriend, also a secondary school drop-out. They had no way of earning an income.

Things took a turn for the better, however, when she was admitted to the Mbouda Women's Promotion Centre, a field unit of the Ministry of Women's Affairs. Today, thanks to the education and training in vegetable farming and poultry techniques she received from the centre, Mireille runs a vegetable farm on which her small family thrives.

"I make almost 130,000 francs (US$200) a month and my family is totally dependent on it," she says.

Mireille, like many others, has benefited from an Internet service provided by the Association for the Development of Women and Health (FESADE), a non-governmental organization (NGO), based in the capital Yaounde. FESADE is connected to the Sustainable Development Networking Programme (SDNP) started by the United Nations Development Programme (UNDP) in September 1996.

It was not easy to introduce cutting-edge technology in a country with a mostly rural population and five telephone lines for every 1,000 people. This is why SDNP's approach became service oriented, geared to helping people bridge the gaps in the local infrastructure through networking. Relying heavily on local resources, Wawa A. Ngenge, the national coordinator for the programme, managed to stretch the $250,000 in UNDP project funds two years beyond the planned two-year period. "We achieved this by relying on the resources of the network of members that we put together," he says.

The network consists of 300 members including scientists, NGOs, academics and government officials. "These people worked with us to identify areas of information technology which they could apply to their daily activities," says Ngenge. To reach out to poor communities, the programme's ultimate target group, many members serve as intermediaries, working with the grassroots population. Among them are rural NGOs and women's groups.

SDNP took off initially with three computers in Yaounde and later created a website, which was advertised by its links to other places. Now in its fourth year, SDNP has more than 100 people with electronic mail boxes spread over five of Cameroon's 10 provinces. The programme has seven mailing lists with 330 members sharing information on a variety of issues on sustainable development. It also services more than 10,000 people through its Internet Help Desk.

Networking at the grassroots level

Monthe Giselle, Director of the Mbouda Women's Promotion Centre, serves as an intermediary between FESADE and her institution. She travels 300 kilometres regularly to Yaounde for Internet seminars, training workshops and information exchange. Giselle shares this information and training with over 36 women's socio-economic and cultural groups, which are spread over four towns and several villages. The women's centre offers training in health and nutrition, dressmaking, farming and livestock breeding and has trained more than 100 women's groups, as well as individuals.

Unlike the training centre in Mbouda, the Society for Initiatives in Rural Development and Environmental Protection (SIRDEP) in the provincial capital of Bamenda, 450 kilometres from Yaounde, is directly connected to SDNP's e-mail server. This provides contact with its partners, and also helps the search for global initiatives to improve the living standards of rural communities. It is an invaluable tool for researching issues related to the environment, agriculture and livestock raising. SIRDEP works with over 40 diverse groups in the province.

Mama Dominica Lacombi, 57, is the leader of a group based in Mankon, a village near Bamenda, 370 kilometres from Yaounde. She depends on SIRDEP for information on modern techniques for breeding livestock. She is illiterate but that has not stopped her from being a successful entrepreneur. She told CHOICES that her eight-person group borrowed about $800

from SIRDEP and received training on pig rearing. The group now owns a pig farm with 60 pigs. "Since we initiated our links with SIRDEP, our standard of living has improved, as well as our vision for the future," says the mother of seven grown children.

"Nobody can underestimate the valuable role of the Internet in our lives today in Cameroon," says Clara Anyangwe, an agro-economist. Information downloaded from SDNP has assisted SIRDEP enormously in its training programme, which includes university graduates. The programme helps them to find jobs or to create small enterprises.

Heifer Project International (HPI) is a Bamenda-based international NGO concerned with livestock breeding and development. It depends on the e-mail and Internet services provided by SDNP, to communicate with its head office in the United States and project donors in Holland and other parts of the world. More importantly, the development network helps the organization to feed its national network of projects. "Seventy percent of our project partners and beneficiaries in Cameroon are women whose practical needs in livestock production are addressed by our organization with help from the networking programme," says D. Henry Njankoi, the deputy director.

A woman selling second-hand clothes after being taught business skills through the networking programme.

Getting a good price for produce

Buyam sellams (pidgin English) are the women who buy and sell in small quantities. Economic crises in Cameroon have made many women dependent on selling a variety of produce to make ends meet. They join small *njangis* (informal cooperatives) that use the services of SDNP directly, or indirectly, for assistance in management, accounting and profit sharing. Julienne Tsangeu-Seppou captures it aptly, "By using the network, we also create our own local network by reinforcing capacities through women's organizations. This helps to bring out the creativity and competencies of women."

Mama Dominica Lacombi being interviewed for CHOICES, at her group's pig farm in Mankon.

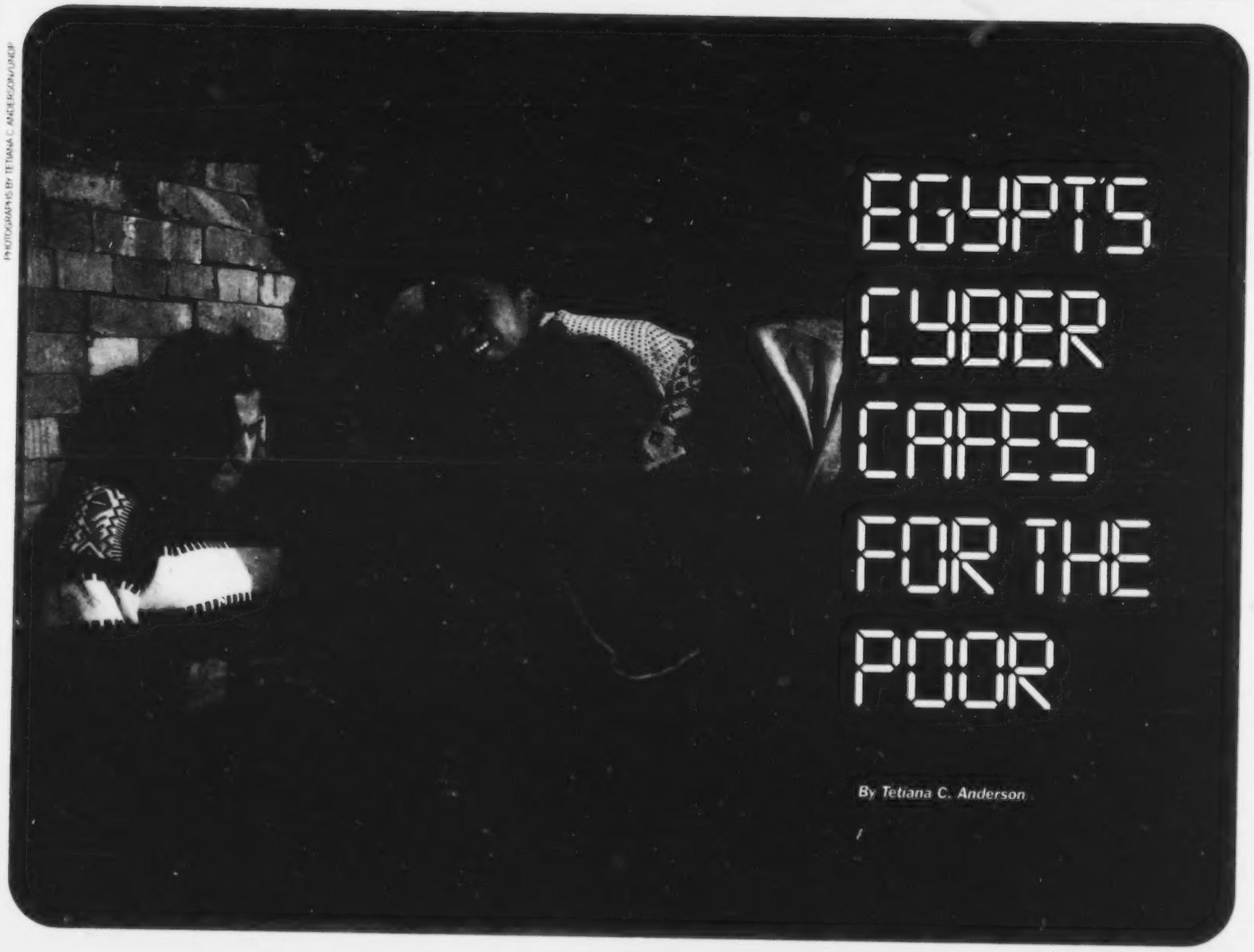
Ma Menye Elizabeth is one of many women who has discovered her hidden abilities. Two years ago, this widow who bought goods from the small town of Mbalmayo on the outskirts of Yaounde and sold them in Yaounde did not have 1,000 francs ($1.50) of her own. Today, because of assistance from EDUC-ACTION, an SDNP-connected NGO, she makes about 32,500 francs ($50) a week.

Although excited at having access to the Internet and e-mail, the people interviewed by CHOICES had one complaint: the problems faced when trying to use the Internet resulting from the poor quality of local telephone lines.

Ngenge, SDNP's chief, says that this is a constraint to Internet expansion in Cameroon, and not a problem that SDNP can solve on its own. But SDNP has helped by providing cheap e-mail access ($16 a month) by installing servers in each province, where there are NGOs or small and medium enterprises that can host them. These servers can exchange mail with the SDNP server in Yaounde at night, when telephone service is cheaper and more reliable because there is less pressure on the few available lines. "Since few members can afford the Internet service," Ngenge says, "we provide them with the information they want. They send us an e-mail, we do the research, identify the appropriate web pages, download them, bundle them and send them out onto the network as attachments to e-mail."

Patricia de Mowbray, UNDP's Resident Representative in Cameroon, is emphatic about information and communication technologies as tools for reducing poverty. "Information technology is one of the keys to reducing poverty and to allowing everyone—man, woman and child—to have access to such important assets as information for development purposes. This is one of the major instruments that I would like to put at the disposal of the Cameroonian government to support its strategy for poverty reduction." ■

Tamfu Hanson Ghandi is a journalist and former broadcaster with Radio Cameroon. He works for the communication unit of the Ministry of Economy and Finance.



PHOTOGRAPHS BY TETIANA C. ANDERSON/UNDP

EGYPT'S CYBER CAFES FOR THE POOR

By Tetiana C. Anderson

Sharkeya, Egypt—The best way to introduce the vast world of information technology (IT) may be to demonstrate its potential. But it is not easy to take a concept like the World Wide Web to a land which, in many places, is still tilled by the power of man and beast and where the word Internet is an enigma to most people.

Creating an environment "where the poor in developing societies can be given a hand to become participants and not bystanders in the information revolution is fundamental to any programme aimed at achieving sustainable human development in the new Millennium," says Edmund Cain, Resident Representative of the United Nations Development Programme (UNDP) in Egypt.

In Sharkeya, one of Egypt's 26 governorates, Technology Access Community Centres (TACCs) sponsored by UNDP are introducing IT to people who do not have access to computers because of income, education or location. A TACC is similar to an Internet cafe in that it has a phone, fax, computers, printers and Internet service, but there is a dramatic difference: the telecentres train civil society groups, the private sector, low-income groups and individuals about information access. This includes long-distance education, telemedicine, e-commerce, assistance to small businesses, environmental management and women and youth empowerment. In addition, the TACCs are hubs for electronic content creation, especially in Arabic, responding to community needs and interests.

"The whole point of the programme," says Cain, "is to open the world of IT to those who would otherwise not have an entrance. If you just access the haves you are not going to be hitting the real numbers."

The TACCs pilot project in Egypt is part of a series of similar ventures in which UNDP is involved in Africa, the Arab States, Asia, Latin America and the Caribbean.

Egypt's three centres opened in March 1999 and are located in Zagazig and Tenth of Ramadan cities, both roughly 80 kilometres from Cairo in the Nile Delta region. The centres' clientele use them to access information that can improve their livelihoods. Ahmed Atef grows wheat, beans and vegetables on his land near Zagazig and says that he is using new and better methods of fertilization that he discovered on *tacc.egnet.net*. The website was designed by the centre's personnel and offers information about health, agriculture, education and civil society. It also provides links to community pages, including those created by the local Rotary Club and TACC clients.

To date, Egypt's three TACCs, with a mere 15 computers, have provided training for 2,000 people. "TACCs have a strong development role," says Sherif Hashem, advisor to the new Minister of Communication and Information Technology in Egypt. "But it is not easy for the centres to become self-sufficient. They need some support."

Currently, the TACCs have a two-year total operating budget of about US$800,000, with UNDP contributing $326,000 and the remainder provided by various local entities, including the Governorate of Sharkeya, the Chamber of Commerce and the United Nations Volunteers (UNVs). "By working with other UN system partners, the reach and impact of the programme can be

greatly enhanced under the TACC umbrella," says Cain.

Overcoming the language barrier

Though the project has a large target audience—the 4.2 million inhabitants of Sharkeya—and ambitious goals, it also has colossal challenges. According to UNDP's *1999 Human Development Report,* 80 percent of Internet content is in English. This is one of the obstacles facing Sharkeya, where most of the population speaks Arabic.

The project is "good for society, especially the educated," says Aly Basset Aly, professor at Zagazig University. He thinks the centres should focus on people literate in English because the "uneducated still don't know what the Internet is, and it is dependent on English content," which many cannot read.

"In a society like Egypt, with 65 million people, if only the haves have access, disparities will grow and UNDP's target group, the poor, will not be on board the information age train," says Cain. "There is clearly a demand from different segments of society. This is a very positive development, which we are happy to influence. But our project is not just another cyber net service—in fact you might call the TACC project cyber cafes for the poor," he adds.

This is why a strong grassroots outreach movement is necessary and where the UNVs come in. UNV reports to UNDP and works through the agency's country offices around the world. Assigned to the telecentres is a team of national and international UNV specialists. They help communities to use the communications facilities and devise ways to reach non-English speakers, as, for example, by developing Arabic content.

The volunteers not only promote the TACCs, but also specialize in the major information areas the website offers. "People may not realize they can get information on health issues, for instance," says Sean Osner, UNV and manager of the volunteers in Egypt. "We cater to the needs of a community and show people how technology can help."

A technology access centre in Zagazig.

IT is needed to sustain a village

Back in February 2000, the volunteers coordinated the first village visit to educate the people living in El-Ghar about IT and to discover their needs. El-Ghar was chosen because it is close to a TACC. It sounded easy enough, but less than 24 hours before the planned demonstration of the centre's main resource, the Internet, permission for the volunteers to use the village's only phone line was revoked by the owner.

"Imagine, people in a village of 100,000 using one phone line," Osner says. "To have accessibility to this technology you need basic telecommunications infrastructure." But the volunteers did not have time to wait. They downloaded the saved Arabic pages from the TACC website to show the villagers how Internet information can be useful, grabbed their laptops and headed for El-Ghar. Following the demonstration the villagers were invited to Zagazig the following Friday to use the centres for free. As more come, a small fee will be charged.

Mariz Iskander, a health specialist for the TACC website, sat with a small crowd against a roughly fashioned brick storehouse in El-Ghar and scrolled through health information saved on his laptop. The older women were not convinced that some electronic contraption would have sound advice about how to prevent diarrhoea and dehydration in infants, but others were interested in what the volunteers had to offer.

Before the laptop-toting volunteers showed up in El-Ghar, 20-year-old Mourad Abd El-Kamel said that he had heard about the Internet but did not know exactly what it was. He says the presentation sparked his interest. His friend, Samah Gharib agreed.

El-Kamel and Gharib were in fact among the five El-Ghar residents at the centre the following week. Gharib stayed all day. Osner remembers the young men's surprise at the Internet's capabilities: "They didn't believe you could write to someone in the United States and that person would respond right away."

The UNV programme and the private sector are only two aspects of UNDP's partnering efforts with potential contributors to the TACCs. While TACCs need hardware, software, service providers and awareness building—they also need commitment.

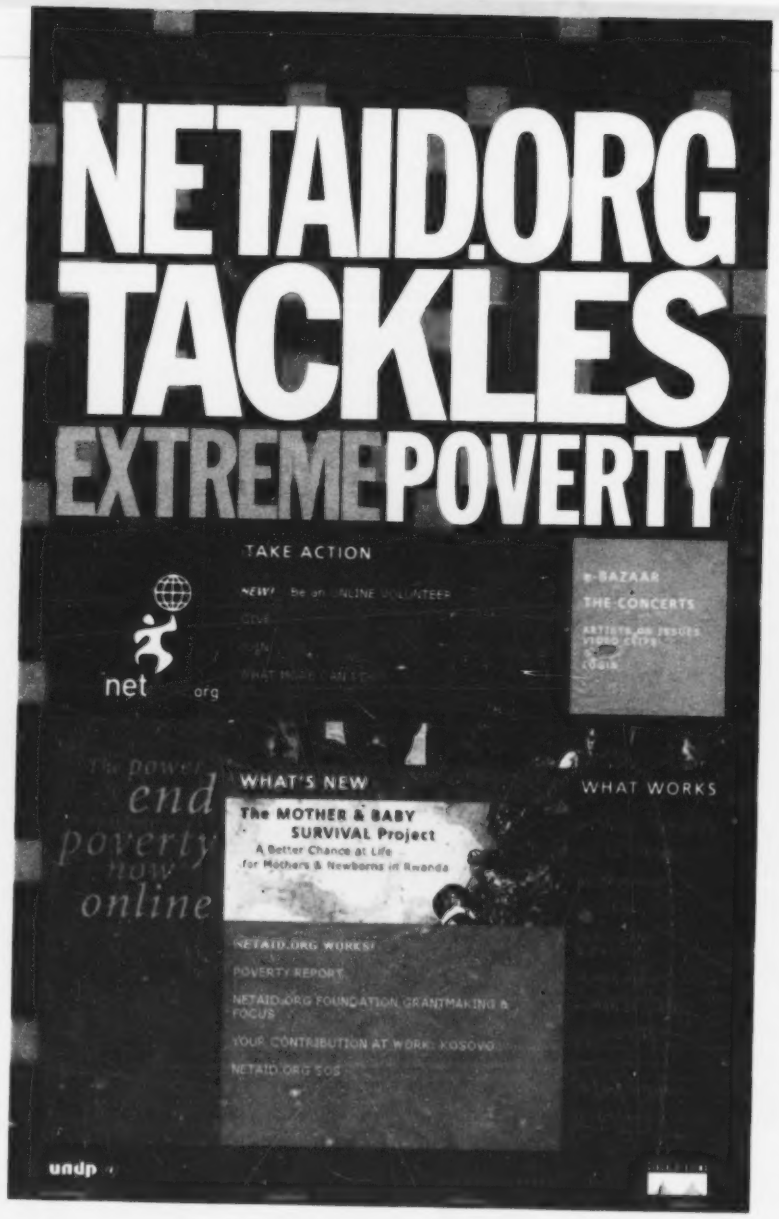
Egypt's Ministry of Communication and Information Technology is expanding the concept of TACCs to include 1,200 more centres around the country based on the model UNDP developed, says Hashem. Though the expansion is independent of UNDP, the agency is helping the process. Cain says UNDP is busy partnering with major companies "to make this kind of service available at every governorate level."

Present funding for the TACC programme in Sharkeya is only for two years—too short a period to complete the goal of becoming a catalyzing force throughout Egypt. "I don't think we'll have our feet fully planted in two years. It took Starbuck's longer than that to fully establish itself, and with a lot more resources," Cain says, "We hope to convince donors, which includes the private sector, that TACCs are an innovative 'development franchise' which will yield huge social as well as economic dividends." ■

Tetiana C. Anderson is a freelance journalist living in Egypt and a professor of journalism at The American University in Cairo. She is a news editor for Bayt.com, *an online porthole to the Middle East. Her work has appeared in media outlets including Vatican Radio,* The Middle East Times *and* Cairo Times.

Karim Kasem from the UN Volunteers, gives a demonstration of the Technology Access Community Centre's website to villagers in El-Ghar.

NETAID.ORG TACKLES EXTREME POVERTY



In rural villages in Rwanda, where one in every 77 live births results in the death of a mother and one out of nine infants dies before its first birthday, there are no computers, no Internet connections, no high-speed technology.

Yet, the power of the Internet and the technology behind a unique anti-poverty website, *www.netaid.org* are giving thousands of expectant mothers and their newborn babies in the southeastern Kibungo district in Rwanda a better chance at survival.

Visitors to the Netaid.org website—individuals from as far away as Chicago, US; Paris, France; and Kuala Lumpur, Malaysia—can purchase, one of a series of birthing kits for distribution to mothers in the district and the traditional birth attendants who help them.

The Mother and Baby Survival Project is a vivid example of how Netaid.org, the global poverty eradication initiative launched by the United Nations Development Programme (UNDP) and Cisco Systems in 1999, is educating web visitors about extreme poverty, giving them the means to fight it, and recording the impact of their contribution online.

A partnership between CNN, *TIME* magazine, the International Rescue Committee (IRC) and the Netaid.org Foundation—the non-profit organization established to manage the Netaid.org website and award grants for anti-poverty programmes—created the Mother and Baby Survival Project. It was launched in April with a CNN news feature and a *TIME* story focusing on the extremely poor conditions under which pregnant women give birth in Rwanda. The *TIME* and CNN features attracted attention to the Netaid.org website where visitors could access facts about life in Rwanda and the needs of mothers and babies. They could also purchase birthing kits online to be delivered to those in need by IRC, and track the impact of their contribution on the site. By 25 April, approximately 9,200 kits had been sold, amounting to US$165,000 in donations.

PHOTOGRAPH BY ED BLIGH/UNDP

Liz McBride, Deputy Country Director for Rwanda, International Rescue Committee, talks to women healers about safe maternity practices.

This kind of grassroots poverty eradication project may seem a far cry from the celebrity-studded events that characterized the early days of the Netaid.org initiative and led to extensive media coverage across the globe. In fact, when Netaid.org burst onto the scene with the September 1999 launch of its website by US President Bill Clinton, former President Nelson Mandela of South Africa, Prime Minister Tony Blair of the United Kingdom, UN Secretary-General Kofi Annan, and a three-venue global musical event one month later, some people asked how the new initiative differed from its musical predecessors, such as *Live Aid* and *We Are the World*.

Today, however, the answer is becoming clear. "Unlike other one-off fund-raising concerts of the 1980s, Netaid.org is designed to be an ongoing movement against poverty, driven by the power of the Internet and the commitment of individuals," said David Morrison, President of the Netaid.org Foundation.

Last fall, tens of millions of people witnessed the performances of Bono, Sheryl Crow, Eurythmics, Jewel and Ladysmith Black Mambazo during the overlapping Netaid.org concerts in Geneva, London, New York and via the Internet, television and radio. But the public's involvement did not end with the last performance. By early this year, the website had more than 50 million hits, and some 8,000 individuals, 3,000 non-governmental organizations (NGOs) and 200 companies had joined the initiative.

The website has been redesigned to include Online Volunteers, a feature which links the skills of individuals in the North with people in developing countries.

Chris Sinton, Director of the Cisco Systems Netaid.org office, said that, with the new features, the website provides valuable services for organizations already engaged or seeking to join the fight against poverty. "One of the major benefits with the Internet is that we can make personal connections and demonstrate results. The Netaid.org website will continue to connect people and communities via the power of the Internet," he added.

According to Morrison, a future priority of Netaid.org will be finding ways to bolster Internet education, connectivity and access in poor countries through the establishment of innovative partnerships. Currently, however, the initiative's main objectives are to rally people in the developed countries to join the fight against poverty through the website's programmes, such as the Rwanda project, and to help people in developing countries become active players in the Internet revolution through the Foundation's grants.

In January, the Foundation Board of Directors—Carol Bellamy, Executive Director of the United Nations Children's Fund; Mark Malloch Brown, Administrator, UNDP; Quincy Jones, Netaid.org producer; and Don Listwin, Executive Vice President, Cisco Systems—announced $1.7 million in grants to 13 NGOs working on the front lines of the battle against extreme poverty in Africa and Kosovo.

By early 2000, the Netaid.org Foundation had received $12 million in donations. The next round of grants is expected to be announced later this year. Application procedures will be posted on the Netaid.org website. ■

Cassandra D. Waldon is a Liaison Officer in the UNDP Communications Office.

SOCIAL DEVELOPMENT:

The Way Forward

By Naresh Singh

"Our shared moral basis for a sustained, cooperative effort—our development model—has failed. We are now a people, a species, without a vision. The first principle of the new model must be that humans and the Earth be in a mutually enhancing relationship."—GERALD O. BARNEY, THRESHOLD 2000.

PHOTOGRAPH BY PHILIP JONES GRIFFITHS/MAGNUM FOR UNDP

The idea of development is seductive; it is also elusive. It promises a lot to everyone, but it has failed to deliver to those in greatest need. In 1944 development and economic growth were largely synonymous, but by the 1950s, when it became clear that this model was not helping the poor, a focus on social development evolved. Its advocates argued that economic growth as development should be pursued, but complemented with social development programmes for those who were "excluded." This approach did not fare much better, and the idea of socio-economic development, in which social development principles were to be mainstreamed in the economic growth process, was born.

Social development is commonly used to include the policies and programmes designed to combat poverty, unemployment, crime, social exclusion, ill health and illiteracy—all noble causes. But noble intentions do not easily produce the desired results; they sometimes produce the opposite. Most social development programmes, in both developed and developing countries, run the risk of fostering the victim mentality, creating dependency and deepening disempowerment, although they seek the reverse.

The 1995 Social Summit in Copenhagen, which addressed the themes of poverty, unemployment and social exclusion, was a significant milestone in the history of development. Apart from its direct outcomes in the form of commitments and an action plan adopted by well over 100 heads of states, the summit raised the political profile of social development. But five years later, while several developing countries managed real improvements in their social development indicators, the problems identified at Copenhagen are still with us and many have worsened. The main reasons for this are the usual ones—lack of new and additional resources and lack of political will.

The results of the Social Summit review will be presented at the Special Session of the United Nations General Assembly in Geneva this month. Hopefully, the Special Session will generate not only innovative solutions, but also the political will to carry them out. I would offer the General Assembly three simple and somewhat basic recommendations:

- Reiterate poverty eradication as the top priority of the international and national development agenda.
- Recommend an operationally enhanced human development strategy as the practical framework for development cooperation for poverty eradication.
- Encourage development agencies and governments to use their existing sectoral mandates as entry points for action towards poverty eradication in a synergistic framework provided by the operationally enhanced human development framework, which could also be called a sustainable livelihoods approach.

All of the above are politically and operationally feasible. The implication of the first is to focus on the single theme of poverty eradication for action over the next five years. Social exclusion could be addressed in the strategy for poverty reduction, and employment should be seen as one of the entry points for action in the strategic action framework for poverty eradication. This provides a clear agenda around which political will, resources and action can be mobilized.

The second and third proposals address the weaknesses of the welfare and/or growth and trickle down approaches to poverty eradication in current vogue. Such a social agenda creates a no-win situation, in the sense that even when it succeeds in squeezing out some reprieve for workers, the poor and the disadvantaged, it produces more victims waiting to be saved and so fosters a pervasive disempowerment process. Further, and more importantly, the rationale places the economy before people.

The human development approach offers a powerful and viable alternative by fundamentally reversing the premise on which development planning proceeds—to put the economy at the service of the people rather than the reverse. The question then is how to address the social development agenda through an enhanced human development approach?

At the operational level, the following would greatly enhance the human development approach to poverty eradication:

- Begin by focusing on what people have (the assets approach), not what they need by defining assets broadly to include human, social, national and physical capital.
- Understand people's adaptive strategies to shocks and stresses and seek to further develop and release their creativity by appropriate policy, governance, technology and investment shifts and inputs.
- Mainstream the environment by giving natural capital the same level of importance as human, social and physical capital in the programme design framework.
- Mainstream gender by paying attention to different patterns of asset ownership by men and women and their different adaptive strategies.

These ideas are already elaborated in a series of draft strategy papers available from UNDP at *www.undp.org/sl.*

On an optimistic note, the evolution of development practice has more often than not been characterized by a willingness to learn from past mistakes and to move forward with new and innovative paradigms. This spirit must continue if the dream of a poverty-free world is to be realized. ■

Naresh Singh is Principal Advisor, Poverty and Sustainable Livelihoods in the Social Development and Poverty Elimination Division, UNDP.
This article reflects the personal views of the author.

NOTEBOOK

TEN YEARS OF DEVELOPMENT ON A CD-ROM

First published in 1990 by the United Nation Development Programme (UNDP), the *Human Development Report* has consistently challenged the prevailing notion that standards of well-being are best measured in economic terms. An invaluable and indispensable tool for policy makers, academics, and journalists, it has helped to provide a clear picture of the effects of current international trends, as well as how a country's people are faring. Now, the report's readers have an even more powerful tool—10 years of Human Development Reports on a single CD-ROM.

In a well-thought-out format, the CD-ROM allows users to access and search the narrative portion of all 10 reports, including the accompanying charts, tables and boxes. It also provides a statistical database, from the 1999 edition, for 174 countries and about 300 indicators ranging from cigarette consumption and literacy to the immunization of one-year-olds against tuberculosis.

Despite the exhaustive content, the CD-ROM is easy to use. Searches can be made by typing in key words or phrases; for example, the word "deforestation" describes how some eight million to 10 million acres of forests are lost each year.

Although the main thrust of every year's report is human development, each zeroes in on a particular theme, such as gender, globalization, human security and consumption, and each can be accessed with the click of a mouse. ■

By Daniel Shepard, a freelance journalist who reports on the environment, human rights, development and the United Nations.

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A WEBSITE FOR SUSTAINABLE DEVELOPMENT

Launched in 1994, the Sustainable Development Networking Programme (SDNP) website *(www.sdnp.undp.org)* was the first of its kind for UNDP. It is currently operational in more than 40 developing countries and provides users, in both rural and urban areas, access to information on sustainable development with links to national SDNP websites in Arabic, Chinese, Korean, French and Spanish, among others.

Although the Internet has evolved substantially since SDNP started operations in developing countries, adequate bandwidth is still a key issue. In addition, the uneven development of the Net has precluded direct country interconnectivity. As a result, it is not surprising for e-mail messages going from Angola to Mozambique to travel through the US Internet backbone. For these reasons, one of the services that SDNP offers is the "mirroring" (copying whole websites to faster servers) of developing country websites.

The SDNP site offers substantial technical information and a virtual help desk that emphasizes "Open Source Software," such as Linux. It also contains a web-enabled database that has more than 700 links related to Networking and IT (NIT) and development.

In December 1999, SDNP established "NIT News" *(www.sdnp.undp.org/news)*, which is also available via e-mail.

A section of the site *(www.sdnp.undp.org/stories)* is dedicated to the good practices and lessons learned from the different SDNP country projects. ■

By Raul Zambrano, project manager of the Sustainable Development Networking Programme, UNDP.

INFO21: FROM GOVERNANCE TO HEALTH

UNDP's INFO21 website *(www.undp.org/info21/)* is a one-stop shop and resource tool for promoting the use and application of information technologies for development.

The site offers access, through hyperlinks, to a plethora of human development material, curricula and best practices arranged by sector and region. It also features information about topical issues, such as governance and human rights.

For example, the health section of the site, which is divided into organizations, telemedicine initiatives and tools, provides development practitioners with basic information, best practices and the opportunity to network with experts in the sector. Examples of HIV/AIDS initiatives demonstrate how the wide dissemination of information can help prevention efforts. In addition, the site provides users with electronically available language, web development tools and know-how to facilitate the creation of local online content in various languages.

Recently, INFO21 received the Featured Site Award 2000 from HealthAtoZ.com for introducing and promoting telemedicine in the context of development. The award cited INFO21's superior content, ease of use, layout and overall appeal.

The site is also an integral part of the KnowledgeBroker site *(www.knowledgebroker.org/)* created in collaboration with UN agencies and Harvard and Yale Universities. ■

By Atsuko Okuda, a programme assistant at the Information Technology for Development Programme at UNDP.

FOOTBALL STAR RONALDO JOINS FIGHT AGAINST POVERTY

Without a stretch of the imagination, football and the UN may appear to have little in common. However, on 1 February 2000, the austere 1920's construction known as the "Palace of Nations," Geneva's UN headquarters, was host to one of the world's most illustrious footballers, Brazilian champion Ronaldo. The occasion was UNDP's appointment of the international legend as Goodwill Ambassador for the Fight against Poverty.

Diplomats and UN officials attended the ceremony, alongside private sector representatives, dignitaries from the world of football, international media and over 1,000 school children. The diverse audience reflected the gist of Ronaldo's appointment, which is for the soccer star to assist UNDP in mobilizing the widest possible range of groups and individuals in a partnership against poverty.

PHOTOGRAPH BY PIERRE VINCI/UNDP

Ronaldo announced that his ambassadorship would be one of actions and not just words. "I suffered a lot during my childhood and I have not forgotten my origins. … I will go to many different countries to give people the possibility to help each other, especially children. The whole world needs to mobilize against poverty."

Ronaldo has already demonstrated his commitment by going to Kosovo, in September 1999, to launch UNDP's communication campaign "Teams to End Poverty," a global initiative combining the wide appeal of renowned personalities with the power of publicity to trigger concrete activism against poverty. His own contribution was to donate a cheque for the rehabilitation of a primary school in Gjakove.

For the same campaign, Ronaldo has teamed up with French football colleague Zinédine Zidane in a photo advertisement to appear shortly in publications. The advertisement calls for the participation of all individuals in finding solutions to the problem of poverty.

"Ronaldo, and other world personalities can help us take poverty eradication to the top of political agendas," said Mark Malloch Brown, UNDP's chief executive. "The challenge is perhaps the greatest one we face at the beginning of the 21st Century, but we now know it is within our reach."

"Most of my dreams have come true," Ronaldo said at the conclusion of his appointment ceremony. "Now I want to pay my debt to people who have been less lucky." ■

By Daniela Bagozzi, a media officer with UNDP Geneva.

EXPO 2000 IN HANNOVER

EXPO 2000 is underway in Hannover, Germany! Its theme is *Humankind-Nature-Technology—A new world arising*. The doors to the United Nations pavilion at the Expo are already open wide to the 40 million people expected to visit the event between 1 June and 31 October.

The UN pavilion is both informative and entertaining and features the work of the organization and 38 of its agencies, including the United Nations Development Programme (UNDP). The United Nations Volunteers are serving as the pavilion's tour guides.

Netaid.org, the UNDP/Cisco Systems website now actively raising global awareness about extreme poverty, is one of the projects featured at the UN pavilion. UNDP projects are also on display in the ZERI Foundation pavilion. ZERI is a not-for-profit organization that initiates projects aimed at meeting the basic needs of humanity while respecting the environment.

EXPO 2000 has approximately 190 participants, including 172 nations and 18 international organizations. Don't miss it! ■

By Marc Tulin, communications officer, Office of the Administrator, UNDP.

For more information, please contact Jean Fabre at UNDP, Geneva. Phone: 41 22 917 8541 and Hilda Paqui at UNDP, New York. Phone: 1 212 906 5305.

SOLUTIONS FOR A TROUBLED WORLD

There are few books that put all of the world's maladies under one cover quite like the Worldwatch Institute's 17th annual *"State of the World 2000"* report. Worldwatch's position is a critique of profit-driven economies that nurture and feed off consumer societies. The book contrasts the spectacular growth and conveniences of modern life, with an exhausting look at the earth's increasingly spoiled environment.

Falling water tables, rising global temperatures, growing illiteracy, and famine have produced a picture of a world gone wrong, says Lester R. Brown, the Institute's director.

As in the past, Brown rings a cautionary bell: "Caught up in the growth of the Internet, we seem to have lost sight of the earth's deteriorating health. It would be a mistake to confuse the vibrancy of the virtual world with the increasingly troubled state of the real world."

Global climatic change, and population growth that has reached a crisis stage in some parts of the world, lie at the root of the report's grim view of the earth's future. The swelling of cities, especially in countries where income distribution is severely skewed, has placed extreme pressures on water and land resources.

The number of underfed and undernourished has reached 1.2 billion, a statistic contrasted with the report's assertion that another 1.2 billion people are obese.

Many of Worldwatch's solutions are not new: taxing companies that pollute and encouraging the use of renewable energy sources. Others, such as holding corrupt governments accountable for their spending and management, deserve more review.

Since its release in January, the report has been both applauded and vilified. To some, Brown is a doomsayer, whose yearly reports overstate the earth's problems. To others, the report provides a comprehensive overview for policymakers, activists and writers. Michael Oppenheimer, chief scientist at the Environmental Defense Fund, told The Boston Globe that the report "provides us with a road map, not only to the problems that the global environment has encountered, but also to solutions." ■

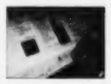
By Leon Lazaroff, a reporter for The Daily Deal *in New York. He has worked for the* Associated Press *in Mexico and Spain, and with* Houston Post and The Christian Science Monitor.

Available from W.W. Norton & Company. To order in the US: 1 (800) 555-2028 Website: http://www.wwnorton.com Price: US$14.95, 262 pages Website: http://www.worldwatch.org

MATTERS OF FACT

Information is drawn from various editions of the *Human Development Report*, commissioned by the United Nations Development Programme. The report is published in English by Oxford University Press, and in 13 other language editions by a variety of publishers.

Information Technology. It took radio **broadcasters** 38 years to reach an audience of 50 million; **television** 13 years and the Internet just four. In 1998, there were an estimated 143 million **Internet users,** with numbers expected to exceed 700 million by 2001. Some 88% of all users in 1998 lived in industrial countries, home to less than 15% of the world's people. A **computer** costs one month's salary for the average American, compared with eight years' income for the average Bangladeshi. › In several African countries the average monthly cost of **Internet connection** and use runs as high as US$100, compared to $10 in the United States. A quarter of the world's countries still do not have one telephone per 100 people. › The United States has more computers than the rest of the world combined, and Thailand has more **cellular phones** than the whole of Africa. ›

HealthNet is a **networked information** service supporting health-care workers in more than 30 developing countries, including 22 African states.  The network provides summaries of the latest medical research, **e-mail connectivity** and access to medical libraries. Doctors in Central Africa used it to share information about the 1995 outbreak of the Ebola virus. Malaria researchers at a remote site in northern Ghana use the system to **communicate daily** with the London School of Hygiene and Tropical Medicine.

In 1990 more than 90% of **data on Africa** was stored in Europe and the United States. The Internet is bringing the data back home to African policy-makers and academics.